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Garden Guide

for 1953

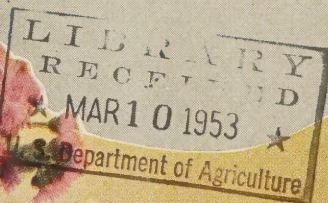
DUTHIE COMPANY

"Our Seeds Grow Friends"

1101 MAIN ST.

LEWISTON, IDAHO

Seeds · Bulbs · Plants



Your Lawn

How to Make It . . .

A well made lawn will last a long time, so it pays to be thorough in preparing the soil.

Drainage is the first consideration. Water logged soil will not support a good turf. Tiling is one way to promote good drainage; another is to work liberal quantities of sand and gravel into the subsoil.

Topsoil is important. In many instances the site for the lawn is covered to a considerable depth with subsoil from the basement excavation. If you cannot prevent this the next best thing to do is

HOW MUCH SEED?

You can figure how much lawn seed you need from the table below, which is compiled on the basis of 1 pound of seed for 200 square feet of lawn.

250	10x 25	1¼
625	25x 25	3¼
1000	20x 50	5
1250	25x 50	6¼
1875	25x 75	9¾
2500	25x100	12½
3750	50x 75	18¾
5000	50x100	25
5625	75x 75	28½
7500	75x100	37½
10000	100x100	50

to have the lawn site covered with a 6-inch layer of good loam. Into this top layer of live soil work garden compost, peat moss and commercial fertilizer.

At this point it is a good idea to rake the ground roughly and water it well to bring up the weeds. When they come up chop them off. Repeat the watering and hoeing until the weeds have been considerably reduced in numbers.

Roll the ground before seeding, to prevent it from settling unevenly, and then rake the surface lightly. Sow the seed so as to cover the ground thoroughly, and then rake lightly to cover with soil.

Roll again so as to press the seed in firmly. If you have no roller, use boards and tramp on them so as to pack the ground firmly, but a roller is preferred.

Grass seed will germinate in from 8 to 15 days, according to the weather. If a lawn is made during the summer, the ground should be covered lightly with peat after the seed has been rolled, so as to retain the moisture. New lawns should not be allowed to dry out, not even for a half day. For the first 15 days the lawn should be sprinkled as often as necessary to prevent seed drying out. A lawn should be fertilized after the first cutting, and at least twice a year. Water well after applying.

How to Care for It . . .

Mowing, watering, fertilizing, weed control and insect control are the routine requirements of a well kept lawn. Three of these needs can be taken care of at one time by using one of the new three-way preparations in which fertilizer, weed killer and insecticide are skillfully combined. Ask us for details.

When possible give your lawn a good top-dressing of organic matter at least once a year. Garden compost, peat moss, well rotted leaves, sterilized cow manure, sheep guano are all good materials for top dressing. Application should be made

in early spring. Remember a top dressing of organic material does not remove the need for chemical fertilizers, but it will do for your turf what no chemical fertilizer can possibly do.

WARNING: Do **not** use the **unsterilized** rotted manure which is being sold to inexperienced gardeners. It may be full of wild clover and other weed seeds and pests. It is expensive when you take into consideration that a few pounds of good fertilizer is equal to a sack of manure. If you want a moisture-holding material for top-dressing use peat. We recommend the use of peat.



LAWN SEEDS

Your lawn is a most important part of your garden and must be both usable and attractive. To have a good lawn you must plant good seed of the kind suited to your particular needs. We can supply the good seeds and will be glad to give you the benefit of our experience in choosing the correct kind.

Astoria Bent. This strain of Bent differs from the Seaside variety in that it spreads mostly underground, sending up many root stalks that produce a splendid turf. The growth is upright, of fine texture and is a richer green than Seaside Bent. It is more practical for lawns and succeeds best in heavy soils. Excellent for golf course use. Sow 1 pound to 200 square feet.

Chewings Fescue. Used extensively on fairways and tees on golf courses, and does well on any kind of soil. It also produces a stiff, upright plant. Sow 1 pound to 150 square feet.

Creeping Red Fescue. Fine, round bladed grass, excellent for lawns. Slightly reddish at base. Fine for shade. Hardy. Sow 1 pound to 150 square feet.

Highland Bent Grass (Agrostis tenuis). Highland Bent is a strong surface and underground creeper that makes a dense, uniform, fine turf and is adapted to a wide range of soil and climatic conditions. A low grower, it is usually considered as requiring less irrigation and standing more abuse than other bents. The dark green color holds well throughout the year. Very good for lawns, parks, and playgrounds.

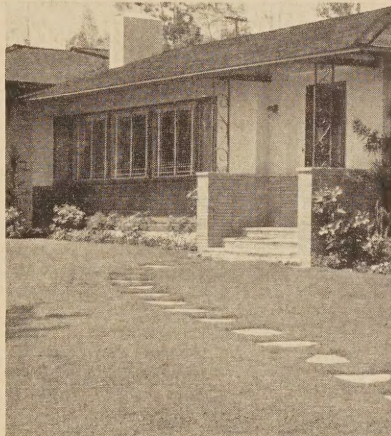
Kentucky Blue Grass. Makes an excellent lawn of a dark green color. It forms a fine mat, and with care and water makes one of the best lawns. Sow 1 pound to 200 square feet.

Red Top. A fine-bladed grass that succeeds on almost any soil, although it does best under moist conditions. It is used in almost all lawn mixtures. Should not be planted by itself unless specifically recommended. Sow 1 pound to 200 square feet.

Shadyland Blue Grass (Poa trivialis). An ideal perennial grass for shady spots. Is closely related to Kentucky Blue Grass, but somewhat finer and softer in texture. It is a creeper with an apple-green color. Requires plenty of water. Sow 1 pound to 200 square feet.

Shady Lawn Mixture. This grass is especially adapted for growing in very shady places or near building where other grasses will not grow. If you have a shady, barren place, try it. Sow 1 pound to 200 square feet.

White Dutch Clover. Very low growing sort, principally used in poor ground to give a green color. Many like it in lawns, especially where grass does not do well. Sow 1 pound to 300 square feet.



Ask for Prices on Lawn Seeds

Lawn Seed

Especially adapted for your locality

SPECIAL LAWN MIXTURE

The Best All-Purpose Lawn Grass Seed

A wonderful mixture that is the result of years of experimenting. It is especially prepared by us from the highest quality seeds that can be produced. It makes a smooth, green, velvety lawn with a thick bottom, free from common grasses which are inclined to produce clumps or knots. Only the very finest of varieties of the most suitable grasses for making an even, thick turf are used in this mixture. The various grasses composing this well-balanced blend are fine-bladed and deep rooting, sure to produce the best results under average conditions of soil and climate. It is all plump, heavy seed of finest quality. Sow 1 pound for a plot 10 by 20 ft. (200 sq. ft.).

Greetings from a Neighbor!

So you have never thought of your seed store as a neighbor. But that's what it is, and a good one to have around especially now with the gardening season just upon us. Having been here for some time, it is not merely a place where you can shop for good seed plus all the things that nowadays make gardening so much easier; it is also a source of local gardening know-how, and ever ready with advice. A bit of that is being passed on to you in this handy guide. It's not just the usual seed catalog due with the season, but a collection of selected gardening information, brief, pertinent, easy to read; a part of what we have to offer to you the year 'round. Drop in and let us serve you once. You'll always want to come back again.

FERTILIZERS

for Your Lawn

ALL SOLD AT CURRENT MARKET PRICES. ASK FOR QUOTATIONS

Ammonium Sulphate is a valuable fertilizer for all plants in which large leaf development or rapid growth is desired. It is also used for top dressing lawns, producing a thick velvet growth and discouraging the weeds. It is a highly concentrated nitrogenous product, containing 25¼ per cent ammonia, 20¼ per cent nitrogen. One pound to 200 square feet is sufficient application for lawns. **Note.** Not recommended for blue grass.

Bone Meal. Fine for lawns, rose bushes, grape vines, especially where a moderately slow fertilizer is needed for the deep-rooted shrubbery and where a perfectly safe fertilizer is required. It contains phosphoric acid and some nitrogen.

Granulated Peat Moss. For greenhouse, garden and home. Our peat moss is of the finest quality you can buy anywhere at any price. Its use contributes to the humus content of the soil, lightening heavy clay and binding sandy soils. It insulates soil against freezing and thawing in winter and conserves moisture in summer. Clean, odorless, economical.

Sheep Guano. An efficient fertilizer to use on lawns, in the garden, the perennial border, shrubbery beds, small fruit garden, flower beds, etc. It is safe and dependable. A natural plant food and not a chemical stimulant.

Superphosphate (Acid or Rock Phosphate) is a water soluble combination of phosphoric acid and lime which is formed by the action of sulphuric acid on raw phosphate rock. It aids in plant nutrition and assists the plant to assimilate other ingredients. Good for lettuce, truck crops, cereal crops, and alfalfa.

Hydrated Lime. The constant watering of lawns tends to sour the soil and eventually the lawn becomes foul with sorrel, Creeping Charlie, and other weeds which thrive in an acid soil. This condition may be improved by applying hydrated lime. **NOTE:** Before applying lime to your lawn, consult your county agent or your seedsman.

Muriate of Potash. This fertilizer is especially valuable for fruit trees and berries.

FLOWERS ... and how to grow them

A carefully selected list of the best varieties for your garden . . . with greatly expanded guide to success in flower growing.

Varieties marked * have received an award by

ALL-AMERICA SELECTIONS

This is a sign of outstanding merit since AAS awards are given only after rigid testing by expert growers in all parts of the U. S. A.

AGERATUM (a) Grp. 2

Fluffy blue flowers all summer on dwarf compact plants. Easily grown in any soil. Excellent for edgings or rock gardens.

Midget Blue. Fine dwarf Ageratum 2 to 3 inches high, smothered with small, true Ageratum blue flowers. **Pkt. 15c.**

Blue Ball. Compact round plants. 6 inches tall, hidden by a mass of pure blue flowers. **Pkt. 10c.**

ALYSSUM, Madwort

Blooms the entire season; popular for beds and edging in summer, or for growing in pots and boxes for winter bloom.

Carpet of Snow (a) Grp. 2. White flowers on flat growing 3-inch plants. **Pkt. 10c.**

Saxatile compactum (p) Grp. 5. Basket of Gold. Compact plants covered with a wealth of golden blossoms in early spring. 12 inches. **Pkt. 10c.**

Maritimum (Sweet Alyssum) (a) Grp. 2. Fragrant white flowers all season. 12 inches in height. **Pkt. 10c.**

***Alyssum ROYAL CARPET.** 1953 Top Winner All America Selections. In drifts of vibrant purple or as a neat hedging for the flower bed, this new Alyssum will grow only a few inches high but 10 inches across, flowering throughout the season. No pests, no diseases. Easy to grow from seed and self-reseeding. **Pkt. 25c.** See color illustration on page 11.

Violet Queen (a) Grp. 2. Low compact plants with an abundance of sweetly scented flowers of a rich deep shade of violet. Neat and free flowering. **Pkt. 15c.**



IMPROVED CREGO ASTERS

ASTER (a) Grp. 4

From July until September the Aster reigns supreme in the garden. We offer remarkably fine strains, producing perfect flowers of great beauty. Asters require a rich soil kept open by continuous cultivation.

Heart of France. Deep ruby-red, fully double, well rounded flowers on long stems. Midseason until frost. **Pkt. 10c.**

IMPROVED CREGO WILT RESISTANT. The large shaggy flowers with long curled petals are not unlike the ostrich feather. The plants are strong, heavily branched and grow about 2½ feet in height. Separate colors:

Azure Blue, Crimson, Orchid, Pink, Purple, Rose, White. **Pkt. 15c.**

Crego Finest Mixed. **Pkt. 15c.**

SUPER GIANTS. Combining the Crego type of flower with the Beauty Aster's long unbranching stems, this full flowered race of Asters stands at the head of the list. They are superb cut flowers, too.

Super Giant El Monte. Deep glowing crimson. Not wilt resistant. **Pkt. 15c.**

Super Giant Los Angeles. Fully double shell pink. Not wilt resistant. **Pkt. 15c.**

Wilt Resistant Super Giants. Super Giants are now available in a WILT-RESISTANT strain. In the following colors: **Azure, Crimson, White, Peach, Purple** and mixture of these five. **Pkt. 25c each.**

Improved Giants of California. Large, graceful Crego type flowers borne on long heavy stems. Flowers from late summer to frost. Height 3 feet. Fine for cut flowers. Finest mixed. **Pkt. 15c.**

PRINCESS ASTERS, WILT RESISTANT. The blooms of this type have a full crested center surrounded by several rows of strong guard petals.

Princess Elizabeth. Pure white.

Princess Susan. Pure clear deep blue.

Princess Pat. Bright crimson.

Princess Asters Mixed. **Pkt. 25c.**

BABYSBREATH, Gypsophila

Airy sprays of white flowers, lovely for bouquets.

Brilliant Carmine (a) Grp. 3. Dainty bell-shaped blooms. Make sowing two weeks apart for continuous flowers. **Pkt. 15c.**

Covent Garden Market (a) Grp. 3. Large, single white flowers, 6-8 petals each. **Pkt. 10c.**

Paniculata Single White (p) Grp. 5. Hardy perennial with sprays of tiny rose shaped blossoms. If cut before the flowers are fully opened sprays can be used in winter bouquets. 3 ft. **Pkt. 10c.**

Paniculata Double White (p) Grp. 5. Double form of the above. Excellent for fresh or dry bouquets. **Pkt. 25c.**



PANICULATA SINGLE

The Secret of Your Success

We have grouped our seeds according to the culture they require. Find the group number in the alphabetical listing, for example, Ageratum, Grp. 2, and your cultural instructions in the column below.

Group 1

Seeds in this group are difficult to transplant. Sow the seed where the plants are to flower, after the danger of frost has passed. Thin out to the desired distance when the seedlings are well started.

Group 2

Seeds in this group are easily raised outside after the danger of frost has passed. Either sow them in their permanent positions or in a seed bed and transplant to the place where they are to flower.

Group 3

Seeds in this group can be sown outside very early in the season, being very hardy. When the seedlings are big enough they should be transplanted to their permanent positions.

Group 4

Sow seeds in flats in early spring for best results. When seedlings are large enough to handle transplant to other flats. Harden off gradually and plant into beds when the weather is settled.

Group 5

In this group are most of the perennial seeds. They can either be sown indoors in flats or outside. If sown outside it is good practice to sow them in mid-spring so they will reach a fair size before the hot weather starts. After the seedlings are big enough to handle, transplant to allow room for growth. Plant in their permanent places in fall or, if the plants are very small, winter over in a cold frame and plant out the following spring.

For best results with biennials such as Sweet Williams, Canterbury Bells, Wall-flowers and Beauty of Nice Stocks, sow them in summer. When the seedlings are large enough transplant or thin them so they will make sturdy plants by fall. At that time plant them where they are to flower. Handled in this way, these flowers will give a really good display.

Try interplanting some of these showy biennial flowers with your late-flowering Tulips for very pleasing effects.

(a) Annual; (p) Perennial; (b) biennial;
(c) Climber; (r) Rock Garden Plant.

CORNFLOWER, *Centaurea* BACHELOR'S BUTTON or

(a) Grp. 3

Among the hardiest and easiest of all annuals. Will grow anywhere. Narrow foliage and wiry stems. Pick off the old blooms—have flowers all summer long.

Cornflower, Jubilee Gem. Compact plants a foot high, literally covered with bright blue flowers. Pkt. 15c.

Cornflower, Cyanus Double. This superb Cornflower has handsome large double blooms in pink, red, white and blue. 2 to 3 feet tall.

Mixed. Pkt. 10c.

BALSAM

Lady Slipper (a) Grp. 2

Gorgeous masses of brilliant double flowers are produced in the greatest profusion. A favorite for a shady spot. Height, 2 feet.

Camellia Flowered. Most improved type. Finest Mixed. Pkt. 15c.

BEAN (a-c) Grp. 2

Scarlet Runner. An ideal climber to provide summer shade for porches, pergolas. Bold, handsome foliage, many large sprays of bright scarlet flowers followed by edible beans in 6-inch pods. Vines will reach 20 ft. or more. Pkt. 10c.

BELLIS

English Daisy (p) Grp. 5

Monstrosa. Splendid early flowering daisy. Large fully double daisies in rose, red and white on 6-inch stems. Pkt. 25c.

BLACK EYED SUSAN

Thunbergia (a-c)

Beautiful rapid growing annual climber, preferring a warm sunny situation. Used extensively for hanging baskets, vases, low fences, etc. Very pretty flowers in buff, white, orange and other shades, with dark eyes.

Alata. Finest mixed. Pkt. 10c.

BLUE CUP FLOWER

Nierembergia (a) Grp. 4

***Purple Robe.** All America Bronze Medal 1942. Very dwarf cushion-like plants with flowers of violet blue. In bloom for a long period. Pkt. 25c.

BUTTERFLY FLOWER

Schizanthus (a) Grp. 2

One of our finest hardy annuals. Showy flowers of various colors, closely resembling some species of Orchids. Does well in shade.

Giant-flowering Hybrids. An extra select, compact, large flowered strain in a perfect blend of rose, pink, salmon, crimson, deep purple, and many bicolors, all handsomely veined in pure gold. Pkt. 25c.

CALIFORNIA POPPY, See Poppy

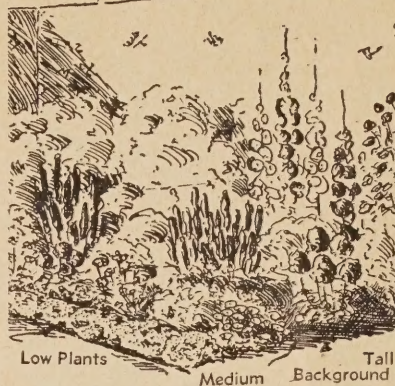


NIEREMBERGIA, PURPLE ROBE

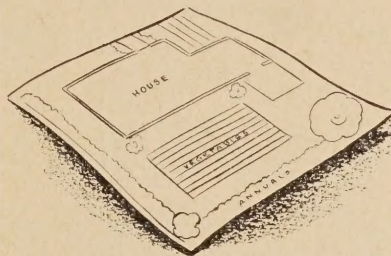
YOUR GARDEN'S PART IN YOUR LANDSCAPE

Flower gardens do two jobs: 1. Provide cut flowers for indoors. 2. Harmonize lawns, shrubbery, driveways, walks, buildings in one picture to be enjoyed both from within and without your house. Workable soil, light, air circulation and drainage are basic. Use portable planters over areas where soil, drainage or conditions of light make gardening hard.

Low hedge or walls can define margins of a cut flower garden, or can be tied into a vegetable garden plan and area for compost, tool and implement storage place, etc. All designed to relate harmoniously to the rest of the landscape. Other flower garden sites devoted to special, formal features, such as rose garden, herb garden etc., should serve as emphasis for the permanent features in the general home ground plan.



PLANNING — YOUR KEY TO SUCCESS



You can change plans upon a paper faster, cheaper and more easily than you can upon the ground after you have started making your garden. A rough sketch will show you relations of various items—vegetables, low-growing, tall, wide-spreading, shade-loving, vining, shrubby or other types of garden material. And a rough sketch, upon which additions may be made when you see features in other home grounds that will serve effectively in yours, will gradually bring your whole picture into a clear focus before you have done much spading, and will add up into a beautiful garden, with fewer basic changes necessary later.

CALENDULA

Pot Marigold (a) Grp. 2

Blooms freely in early summer and continues into fall, requiring little care to grow to perfection. 18 to 24 inches high. May also be planted in fall.

Campfire Improved. A very deep strong orange with distinct scarlet sheen on upper side of each petal. Blooms are flat across top, 4 inches in diameter. Pkt. 15c.

New Sunshine Calendula Chrysanthia. A clear Buttercup yellow with loosely arranged petals, incurved at the center, and reflexed at the edges. The foot-long stems are strong and wiry. Pkt. 15c.

Pacific Beauties. Large, full double blooms with long petals, arranged loosely to form a ball. About 16" tall, with huge flowers of lemon, apricot and persimmon shades, often attractively tipped. Heat resistant. Mixed Pkt. 25c.

CALLIOPSIS (a) Grp. 3

Very showy subject for garden decoration and cutting.

Tall Mixed. All double. Contains a wide range of color combinations, including yellow, maroon and crimson, mostly bi-colored. Pkt. 15c.

CANDYTUFT (a) Grp. 1

Valuable for masses and edging. Highly desirable for bouquets.

Giant White Hyacinth Flowered. Very fine for cutting. Pkt. 10c.

Umbellata. Of compact and branching habit. Colors include carmine, crimson, pink, lavender, rose, cardinal and white. Mixed colors. Pkt. 10c.



CANTERBURY BELLS

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Campanula Medium (b) Grp. 5

Calycanthema, Cup and Saucers. The most beautiful type with large bell or cup-shaped flowers surrounded at the base by a large calyx of a similar color, the whole resembling a cup and saucer.

Finest Mixed. Pkt. 10c.

Single. A form with charming pyramids of fluted bells, 2 to 3 ft. Mixed Pkt. 10c.



CLARKIA, ELEGANS

CLARKIA (a) Grp. 3

A truly charming annual of the most graceful habit, flowering in July. Large numbers of double almond-like flowers in long racemes.

Elegans. Double choice mixed with pink, red, salmon, lavender and white colors. Height 2 feet. **Pkt. 10c.**

CARNATION (p) Grp. 5

Few flowers surpass in beauty of form or delicious fragrance the richly-hued carnation.

Chabaud Giant. 18 inches. This variety blooms six months after seeding and continues throughout the summer. The plants, robust and erect, supply handsome, double, clove-scented flowers of extra large size. **Mixed Colors. Pkt. 15c.**

CASTOR BEANS

Ricinus (a) Grp. 2

Magnificent, tall, large leaved plants of tropical appearance, succeeding in a warm, sunny location. Beautiful for large foliage groups and background. Height, 10 to 12 feet.

Mixed Varieties. Pkt. 10c.

COCKSCOMB

Celosia (a) Grp. 4

A showy annual producing massive heads of bloom in rich shades of crimson and yellow.

Cristata. Choice mixed. Height 9 to 18 inches. **Pkt. 15c.**

Plumosa (Improved Feather Type). Choice mixed. Height 2 feet. **Pkt. 15c.**

COLUMBINE

Aquilegia (p) Grp. 5

These are among the most beautiful of spring and early summer flowers; very effective when grown in the herbaceous border or in groups among shrubbery. Long-spurred flowers on graceful stems 2 feet or more above the fern-like foliage.

Mrs. Scott Elliott's Strain. One of the finest tall strains ever developed, long-spurred, large flowers, in a splendid mixture of colors. **Mixture. Pkt. 25c.**

Long-Spurred Blue Shades. Larger flowered than the other colors, these are of the most beautiful shades of blue ranging from azure blue through Belladonna to the Forget-me-not, all with a rich cream center. Blooming the first year from seed in most climates. **Pkt. 25c.**

CORAL BELLS

Heuchera (p) Grp. 5

A low growing hardy perennial plant with heart shaped leaves, which form a low clump 6 to 8 inches high and bearing during summer, loose graceful sprays of red flowers in great profusion.

Spitfire. Large, rich scarlet. **Pkt. 25c.**

COREOPSIS (p) Grp. 5

One of our most popular perennials, the attractive flowers are borne in great profusion and are excellent for cutting. Height, 3 feet.

Grandiflora Double Sunburst. The double flowers are large, 1½ to 2 inches across, deep golden yellow, and are excellent for cutting as well as for garden decoration. Fine keepers; plants are easy to grow. **Pkt. 15c.**



COSMOS, RADIANCE

COSMOS (a) Grp. 3

These old favorites supply a generous colorful effect during late summer and fall. Fine for cutting as the flowers last well in water.

Early Klondyke Orange Flare. The long-stemmed flowers of bright, vivid orange are freely borne on 2 to 3 foot plants. It blooms very early, midsummer, and continues until frost. **Pkt. 15c.**

***Fiesta.** All America Winner 1952. There is true scarlet in these ruffled flowers. Early, heat-loving, easy to grow. A compact 2½' plant with a riot of bloom all summer long. A cut flower for the house and a handsome border subject. **Pkt. 25c.**

SENSATION COSMOS

A superior type for cutting and all around use. Flowers 4 to 5 inches across on 3 to 4-foot plants.

Dazzler. A luscious shade of velvety crimson maroon. **Pkt. 15c.**

Pinkie. A delightful rose-pink. **Pkt. 15c.**

Purity. Glistening white. **Pkt. 15c.**

***Radiance.** 1948 All America Winner. Striking deep rose and rich crimson; the first bi-color Cosmos ever to be developed. **Pkt. 15c.**

CYNOGLOSSUM (a) Grp. 2

Blue Chinese Forget-Me-Not

Firmament. A hardy annual of the easiest culture, forming strong plants about 18 inches high and producing through the summer months sprays of Forget-Me-Not-like flowers. **Pkt. 10c.**

DAHLIAS

From Seed (rp) Grp. 5

Improved Unwin's Dwarf Hybrids. These double and semi-double Dahlias grow from 18 inches to 2 feet tall and come in many delightful shades. Plants are compact and are as easy to grow as Zinnias. Bloom the whole summer. **Mixed colors. Pkt. 25c.**

IMPORTANT NOTES ON SPADING AND PLOUGHING



Ploughing or mechanical tilling to a good depth is your first step in land and in garden preparation, whether your place is an old one or is starting from scratch.

DON'T PLOUGH MISTAKES UNDER—that will be the very first rule. Blackberry vines, morning glory, poison oak, quack grasses, whipped under with a tiller and turned in with a plough, come back later a hundredfold to plague you.

Chemical brush killer and weed killer treatments should precede ploughing. Then the pests will not be coming up through your lawn or flower bed later, where they can't be removed without damaging desirable plant material.

Before ploughing or tilling, peat, sawdust, or barnyard manure or other organic material should be spread over the surface, to be turned under and worked into the texture of the soil. Where raw sawdust or similar organic material is used, add extra fertilizer to speed decomposition.

Ploughing is not an annual necessity, but **SPADING**, and **TILLING** or **MULCHING** is. Spade when soil is dry enough so that a handful of it squeezed into a ball and dropped from shoulder height will shatter easily. If it is too wet—wait. If too dry, put the sprinkler on it until it is wet enough to work. Dig full spade depth, but don't take

bigger bites than you can handle easily. Drop from hip height to shatter, instead of beating each spadeful to fragments. It saves energy and covers ground faster.

LEVEL BED WITH RAKE. Pitch excess clods into the compost heap to break down into compost, or let them dry in a pile and water them until they break down easily, or leave a trench at one edge of bed to rake clods into and smooth top over.



DAISIES

AFRICAN GOLDEN DAISIES *Dimorphotheca* (a)

The plants are of branching habit, growing about 15 inches high. An easily cultivated annual. Especially suited for dry situations. **Mixed. Pkt. 15c.**

PAINTED DAISY

Pyrethrum (p) Grp. 5. Ferny foliage. Elegant daisies on graceful wiry stems 2 to 3 feet high. Bloom in May and June. **Single Mixed. Radiating petals in many tones of rose and red about a golden center. Pkt. 20c.**

ANNUAL CHRYSANTHEMUM (a) Grp. 1

Merry Mixture. Here is a new strain of Annual Painted Daisies far superior to the old Tricolors. It includes new solid colors and also a better range of the Tricolors. **Pkt. 25c.**

SHASTA DAISY

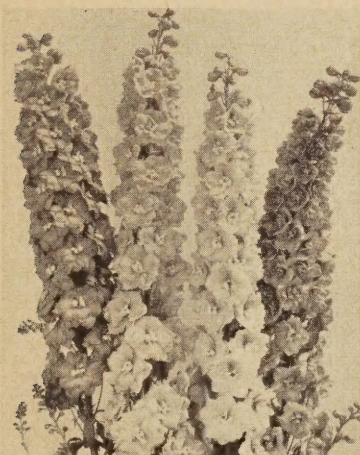
Chrysanthemum maximum (p) Grp. 5

Popular hardy perennial bearing large double and semi-double white blooms with handsome yellow centers. They are excellent for border plantings and especially pleasing in bouquets. **Pkt. 15c.**

SWAN RIVER DAISY *Brachycome* (a) Grp. 2

Brilliant free-flowering annual blooming throughout the summer and suitable for beds or borders. The dainty flowers resemble small Cinerarias. Height, 6 to 12 inches.

Mixed Colors. Pkt. 10c.



DELPHINIUM, PACIFIC HYBRID

DELPHINIUM (p) Grp. 5

Sow in early spring and place in gentle heat. Cover seed pots or flats with a sheet of glass covered with newspaper. Remove glass and paper when seeds begin to germinate. Keep pots or flats of germinating seeds in a shaded place until germination is complete, after which more light can be given. Do not expose to strong direct sunlight until plants are well developed.

Pacific Hybrids. Huge flowers, 2½ to 3½ inches across, beautifully spaced on well balanced tall spikes. Highly resistant to mildew. Color range excellent. Almost 100% double florets.

Mixed. Pkt. 35c.

Blackmore and Langdon Hybrids. A superb strain of large flowered hybrid Delphiniums. Various shades and color combinations in the individual flowers. Very large flowers and spikes. **Pkt. 25c.**

GARDEN SOIL PREPARATION



The foundation for your season's growth is fertilizer that permeates the soil in its first preparation before sowing seed or planting. Cover ground surface with manure if available, or commercial fertilizer. Follow directions as to proportions to the square foot, and turn under with spading. Spread fresh manures in the fall or winter, and spade under in spring. Commercial fertilizer should be spaded in a little before planting is done, unless it is non-burning material. If no manure is used, cover surface area with a layer of peat before spreading commercial fertilizer, thus adding humus continually to the soil as well as the necessary plant foods.

FLOWERING TOBACCO *Nicotiana* (a) Grp. 4

Stately plants producing large, trumpet shaped blooms until frost. Fine for beds and borders. Height, 3 feet. Deliciously scented, especially at night.

Affinis Hybrids. Mixed Colors. Pkt. 10c.

FOUR O'CLOCK *Mirabilis* (a) Grp. 1

Fragrant long-tubed blooms of white, red and yellow on branching 3-foot plants. Blooms from early summer until late frost. All colors mixed. **Pkt. 10c.**

FOXGLOVE, *Digitalis* (b) Grp. 5

This ornamental hardy plant is used extensively for naturalizing in shrubbery borders and along the edges of woods. It grows well under almost any conditions, giving a wealth of bloom during June and July. Height, 4 to 6 feet.

Shirley Mixed. Pkt. 15c.

GAILLARDIA

Blanket Flower (a and p) Grp. 5

Tones of orange, yellow, red and maroon, often beautifully combined in a single blossom, make these flowering plants gay ornaments of the garden all summer. Height, 1 to 2 feet.

Grandiflora Portola Hybrids. (p) Semi-double blooms of magnificent size and broad overlapping petals, golden tipped around glowing centers of bronzy red. **Pkt. 10c.**

Sunshine Hybrids (a). A double type in extremely vivid tones of orange, yellow, gold and red. Mixture only. **Pkt. 15c.**

GEUM, *Avens* (p) Grp. 5

Beautiful hardy perennials, bearing profusely large, showy, double flowers all through the summer. An elegant flower for bouquets. Height, 18 inches.

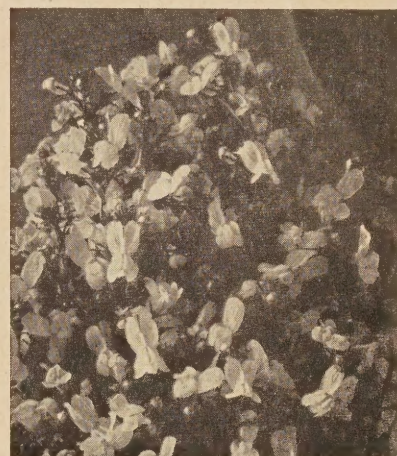
Lady Stratheden. Golden yellow, full large flowers of great beauty. **Pkt. 15c.**

Mrs. Bradshaw. Large, double, brilliant orange-scarlet. In flower throughout the entire summer. **Pkt. 15c.**

GODETIA, *Satinflower* (a) Grp. 2

Very handsome annual plants, especially suited for semi-shady locations. Sow in spring in the open and thin to 8 or 10 inches apart. The flowers are not unlike the Azalea in form.

Tall Double. Long graceful spikes are decorated with double blossoms resembling satin pompons one above another. Height, 2 feet. **Pkt. 15c.**



LINARIA, FAIRY BOUQUET MIXED

ORNAMENTAL GOURDS (ac) Grp. 3

Ornamental Gourds are easily grown in rich soil, where they will produce plenty of fruits. They may be trained on trellises and the ripened fruits used for ornaments. Special mixture of large and small kinds. **Pkt. 10c.**

HOLLYHOCK, *Althaea* (p) Grp. 5

The beautiful color effects produced by these flowers render them indispensable for the old-fashioned garden or the herbaceous border. Height, 6 to 12 feet.

Indian Spring (a). Semi-double bright rose and rosy carmine flowers producing a continuous show until frost. Sow fall or early spring. Flowers five months from seed. **Pkt. 15c.**

Chater's Double (p). Well formed fully double flowers in long straight spikes. Deep rose, salmon rose, scarlet, sunflower yellow and white.

Mixed, 15c.

LINARIA

Miniature Snapdragon (a) Grp. 3

This interesting annual bears flowers which resemble miniature Snapdragons ending in single elongated spurs. Height 8 to 18 inches.

Fairy Bouquet. Small spikes of dainty pastel flowers. Fragrant. Free-flowering and lovely in the border. **Pkt. 15c.**



NEW LARKSPUR SUPREME

LARKSPUR (a) Grp. 3

Annual Delphinium with long floral spikes of double blossoms.

GIANT IMPERIAL. Upright compact basal branching plants producing delphinium-like spikes of double florets on stout stems. **Mixed Shades. Pkt. 15c.**

Carmine King Improved. Rich, deep carmine and salmon flowers on long spikes; 3 to 4 ft. stems. **Pkt. 15c.**

Finest Mixed. Pkt. 15c.

SUPREME LARKSPUR

The new Supreme strain is characterized by a tremendous central flower spike formed by many large fully double flowers with broad petals, closely spaced on the stem. Vigorous. 5-6 ft. high.

Each Color. Pkt. 15c.

Dark Blue. Clear rich purple flowers.

Lilac. Large double florets of clear lilac.

Pink. Clear deep pink florets.

Rose. Pure deep rose.

Salmon. Rich, true clear salmon.

White. Huge double. Pure white.

REGAL LARKSPUR

Regal Mixture. Tremendously long, thick spikes of huge, well spaced florets distinguish this new strain of florist's market Larkspur from all other strains. Height and basal branching habit like the Giant Imperials, but Delphinium-like florets on long, thick spikes. Vigorous and early. **Pkt. 15c.**

Regal Lilac. A clear lilac with green buds.

LOBELIA (a) Grp. 4

A dainty and continuous blooming annual of compact growth, remarkable for its profusion of beautiful blue flowers. Unexcelled for edging, ribbon beds, hanging baskets or window boxes. 6 in.

Compacta, Cambridge Blue. A beautiful large flowered, light blue variety. Green foliage. **Pkt. 15c.**

Compacta, Crystal Palace. Erect and very free blooming. Best dark blue for edging. Fine for pots. **Pkt. 15c.**

Sapphire. A superb variety of hanging habit; large deep blue flowers with conspicuous white eye. **Pkt. 15c.**

LUPIN, Sun Dials (p) Grp. 1

Russell Lupins. Long, closely set spikes of flowers in a great variety of rich colors—deep yellows, oranges, reds, bi-colors. Unlike all other Lupins, most of the spikes retain their florets throughout the whole period of development. **Pkt. 25c.**

MARIGOLD (a) Grp. 2

AFRICAN TALL DOUBLE (Tagetes erecta). Very large globular flowers composed of compact tubular or quilled petals. Height, 2½ feet.

Orange All Double. An improved strain which produces practically one hundred per cent double flowers. **Pkt. 10c.**

Lemon All Double. A fluffy fully doubled variety with pale yellow blooms loosely quilled. **Pkt. 10c.**

Mixed Pkt. Pkt. 10c.

CARNATION FLOWERED, Real Gold (African). Carnation-like petals and unusually brilliant golden color make this flower outstanding. It lacks much of the pungent odor of other Marigolds. Very free blooming. Height, 2 feet. **Pkt. 15c.**

***CHRYSANTHEMUM FLOWERED, Mammoth Mum.** Light yellow, ball shaped flowers, up to 3½ inches across, and 2 to 2½ feet tall. **Pkt. 25c.**

Cupid. This is the only Extra Dwarf African Chrysanthemum Flowered Marigold in circulation. Cupid is the perfect pot or edging Marigold bearing 2½-3" lemon-yellow flowers in profusion on a compact 8" plant. **Pkt. 25c.**

DWARF FRENCH, Double Harmony Hybrid. One of the very finest. Charming and distinct flowers, Scabiosa-like in formation, with colors ranging from yellow to gold, orange, and red. Plants are dwarf, about 1½ ft. high, compact, free blooming. Early and attractive for cutting. **Pkt. 15c.**

For the Rock Garden

ROCK GARDEN ANNUALS Mixed

This mixture of over 30 varieties, not exceeding 12 inches in height, will provide blooms through the entire season. If planted as early as possible, the gardener should have blooms by the end of May. A succession of blooms will follow until late fall when frost will destroy the flowers. A second lot of blooms may be enjoyed on most plants if they are cut back to two inches of the crown and properly watered. **Pkt. 25c.**

ROCK GARDEN PERENNIALS Mixed

A mixture of over 50 rare rock garden perennials with a maximum height of six inches. Some of the items will bloom almost as soon as the frost is out of the ground, others later in the year, insuring blooms all season. A planting made in a suitable place, should remain a beauty spot for years without reseeding if given minimum care. **Pkt. 25c.**



DIANTHUS, Perennial Rock Garden Mixture

Twenty varieties of unusual species of dwarf perennials. When well grown, many plants will produce such an abundance of blooms that daily cutting of flowers will not decrease the loveliness of the plant. With an occasional replanting should last several years. **Pkt. 25c.**

THE FLOWER BORDER

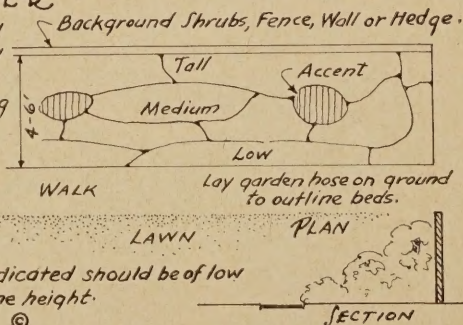
Plan shows how plants are selected and arranged in "drifts" of one kind each, selecting varieties and colors to suit. Keep notes for use in making changes next season.

"Accents" are plants different in appearance from neighbors in form, color and texture.

Add bulbs for spring and mid-summer bloom.

Flower beds narrower than indicated should be of low and medium height or of only one height.

Blueprints for Better Gardens ©



MARIGOLD, REAL GOLD

***DWARF FRENCH SINGLE, Naughty Marietta.** Wide open single flowers, 2½ inches across, of rich golden yellow attractively blotched maroon at base of petals. Freely borne on compact 1-foot plants. Early and continuous bloomer. For beds and borders. Pkt. 15c.



MARIGOLD, NAUGHTY MARIETTA

MIDGET HARMONY. An extremely dwarf form of Harmony. The low ball shaped plants are literally covered with deep golden yellow flowers edged maroon-red. A real gem for edgings or pots. Pkt. 15c.

Scarlet Glow. Single, 10 inches tall, well covered with flowers 1¾ inches across, which vary interestingly from deep scarlet to tangerine yellow. Pkt. 15c.

MINIATURE. Yellow Pygmy. Light lemon yellow French double type, growing only 8 inches tall and compact. Flowers 1¼ inches across, freely produced. Excellent for edging and potting. Pkt. 15c.

Miniature Spry. Extra dwarf, double French type; compact and uniform, so may be used for edging. About 9 inches tall, early blooming, with very light orange crested center and maroon outer petals. Profuse flowering. Pkt. 15c.

MIGNONETTE, Reseda

(a) Grp. 4

This old-fashioned flower still enjoys the greatest popularity. Grown for its sweet perfume, which is most pronounced when grown in a light sandy soil. Height, 6 to 10 inches. Machtet Mixed. Pkt. 10c.

MORNING GLORY

Ipomoea (ac) Grp. 1

Climbers of rapid growth, with beautiful and varied flowers, invaluable for covering walls, trellises, arbors.

Heavenly Blue. An early blooming climber, literally covered with lovely flowers of sky-blue. Flowers 3½ inches across, blooming until frost. Pkt. 10c.

Pearly Gates. Glistening white flowers are 4 inches or more across when fully open. The vigorous, rapid growing vines produce many flowers. Pkt. 15c.

Scarlett O'Hara. Rich dark wine red or deep rosy crimson. Flowers 4 inches in diameter, freely produced on fast growing vines. Very showy for covering a fence or trellis. The dark green foliage does not make a heavy growth, leaving plants graceful in appearance. Pkt. 15c.

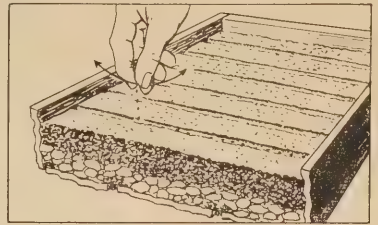
Darling. Sparkling new bicolored Morning Glory. Clare red with snow white throat. Otherwise very similar to Scarlett O'Hara. Pkt. 25c.

Mixed Imperial. These are beyond question the handsomest of all Morning Glories. Flowers of gigantic size. Pkt. 10c.

FROM SEED FLAT TO GARDEN BED

For growing seed indoors use shallow boxes known as flats, but be sure drainage is good. See that the boards on the bottom are spaced about a quarter of an inch apart. Place some material along the cracks to prevent the soil from washing through the bottom. On the bottom half inch of the flat place gravel or soil screenings to help the drainage.

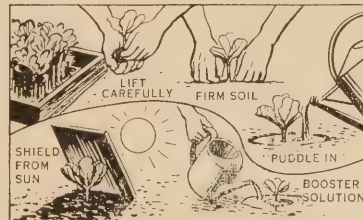
Mark the surface of the flat or seed bed by pressing a narrow edged ruler or garden label lightly into the surface. Sow the seed thinly in the depressions by sifting it out between your thumb and forefinger. The



seed should be covered lightly. Water with fine spray only.

HOW TO AVOID LOSSES IN TRANSPLANTING

Avoid root shock and you can transplant almost anything almost any time. Three things to do are: 1. Move plant with minimum exposure of roots to the air. 2. Protect from too severe sunlight while the plant is establishing self. 3. Get food to the root system as quickly as possible after transplanting job is completed.



If small plants are in a flat, wet soil thoroughly before transplanting, squeeze lightly into ball around root system of each plant, set into ground and firm soil around it. Go over planting with sprinkling pot or hose and puddle each plant in. Planting done in late afternoon gets full night, before exposure to sun. Tender seedlings should be protected for first day, shingles set beside them or with some other shading device. In first 24 hours give each plant a booster solution, either commercial mixture or ammonium sulphate—two tablespoonsful to a gallon of water—and pour it on the ground surface around the plants. Don't pour on foliage or stems, and follow each application with good general sprinkling to get food into ground where feeder roots can pick it up easily.

NASTURTIUM (a and ac) Grp. 1

GLORIOUS GLEAM HYBRIDS. Delightfully sweet scented; semi-double. Color range includes brilliant blend of salmon, golden yellow, orange scarlet, cerise, cream, orange, maroon, and crimson shades. Mixed. Pkt. 10c.

Golden Gleam. Golden yellow, sweet scented. Pkt. 10c.

Scarlet Gleam. Fiery scarlet. Pkt. 10c.

DWARF SEMI-DOUBLE GEM MIXTURE.

An evenly balanced range of colors on dwarf, compact plants. Ideal for border and edging. Plants are dwarf and compact, totally without runners. Pkt. 15c.

DWARF OR BEDDING VARIETIES. Single flowers; dwarf, compact growth. Excellent for borders or for bedding, forming plants about 1 foot high by 1 foot across. **Finest Mixed.** Pkt. 10c.

TALL OR CLIMBING NASTURTIUMS. For covering trellises, fences, arbors, trailing from vases, over rock-work, etc., nothing can equal their great quantities of bloom from early summer until frost. 8-10 ft. Single. **Finest Mixed.** Pkt. 10c.

NEMOPHILA (a) Grp. 1

Small cup-shaped blossoms which are fine ground cover for bulb beds. 6 inches high.

Baby Blue Eyes (Insignis Blue). Sky blue with white eyes. Pkt. 15c.

NEMESIA (a) Grp. 4

This plant is excellent for edging. It sends up many slender stalks crowned with fairy-like flowers. When the flowers fade they may be trimmed back and will bloom again.

Compacta Triumph, Finest Mixed Colors. From the brightest reds, yellows, oranges, to the brightest blue and purples. Height 6 to 12 inches. Pkt. 25c.



PANSY, Heart's Ease (b) Grp. 5

When the Tulips and Daffodils have faded, the rich, deep and varied shades of the Pansies provide a welcome change in the flower beds. The varieties listed produce large blooms of good substance.

Popular Bedding Mixture. These are the popular saucy-faced beauties that everybody loves, comprising the finest varieties in all colors. Pkt. 25c.

Steele's Butterfly Hybrids. A strain mainly of pastel shades of pink, rose, apricot, buff, orchid, lavender, yellow, pale gold, orange, salmon, coral, and flesh, many overlaid with delicate bronze cast. Ruffled and marked with sun rays and blotches of butterfly sheen. Pkt. 50c.

Swiss Giant. Within the last few years the blossoms of this strain have been remarkably improved in every way. The plants are compact in habit and produce immense flowers for a long blooming season. Attractive shades. Pkt. 50c.

PETUNIA (a) Grp. 4

Petunia seed is very fine and will germinate best when covered very lightly (about 1/16") with finely sifted soil. To avoid washing the seed out of the soil, water with a very fine, gentle spray. A pane of glass over the seed flat or pot will aid greatly in keeping the soil evenly moist. Transplant seedlings to flats or pots of rich, light soil when large enough to handle.

Though Petunias grow best in cool conditions, the seed will germinate most readily in heat, such as provided by a hotbed or warm greenhouse.

HYBRIDA NANA COMPACTA. 1 ft. A fine type of Petunia for small beds and borders; often used for pot culture. This Petunia keeps its dwarf stature throughout the blooming season.

***Fire Chief.** (1950 All America Winner.) Compact plants of erect habit covered throughout the season with brilliant signal red flowers. Exceptional uniformity of color and habit make it one of the finest bedding petunias. **Pkt. 25c.**

Glowing Rose. This single bedding Petunia produces mound-shaped plants completely covered with large glowing rose flowers. It starts to flower a month ahead of nana compacta and remains in bloom just as long. **Pkt. 25c.**

Heavenly Blue (Silver Blue). Enchanting light silvery blue. Dwarf. **Pkt. 15c.**

Rosy Morn. Soft, rosy pink with white throat. **Pkt. 15c.**

Ruffled Nana compacta (Little Giants). Ruffled, deep-throated, ball-shaped flowers of medium size completely cover the plants all season. The 3-inch blooms range from deep crimson to white in unique shades and markings. **Mixed Pkt. 25c.**

Snow Queen. Pure white. **Pkt. 25c.**

Velvet Ball. Deep mahogany red flowers, larger than others. **Pkt. 25c.**

Mixed. **Pkt. 15c.**



PETUNIA, GIANTS OF CALIFORNIA

PETUNIA LARGE FLOWERED FRINGED

Theodosia. Soft rosy pink with contrasting golden yellow veined throat. An outstanding variety in this class. **Pkt. 25c.**

PETUNIA GRANDIFLORA (Large Flowered)

Dazzler. A new low-growing variety that maintains its uniform habit throughout the season. The color is a dazzling orange scarlet. Invaluable for borders and bedding. **Pkt. 25c.**

Elk's Pride. Large deep purple. **Pkt. 25c.**

White Beauty. Large, lacy, glistening white. Single fringed. **Pkt. 25c.**

PETUNIA FRINGED AND RUFFLED

Fluffy Ruffles. A ruffled, laced and frilled type of Petunia appearing almost double. Flowers are very large with a deep throat. The mixture is well balanced with shades of pink and white, salmon, salmon pink, deep rose, rose, crimson, and light blue. **Pkt. 25c.**

Garden Giants. Medium-sized ruffled blooms about half the size of the California Giants, early and plentiful, compact and prolific plant. **Mixed Pkt. 25c.**

Supreme Strain. A new strain of many colors and shades. Light, richly-veined throats surrounded by satiny petals which are heavily ruffled. Large blooms, 5 to 7 inches in diameter. Excellent for bedding, window boxes. **Pkt. 25c.**

GIANTS OF CALIFORNIA

Extremely large flowers in shades of rose, pink, salmon, copper and other delightful soft pastel tints. **Pkt. 50c.**

Ramona Strain. A dwarf sturdy growing type especially suited to pot culture. Flowers are beautifully ruffled and fringed with open well-marked throats. Dark and light shades mixed. **Pkt. 25c.**



ANNUAL PHLOX

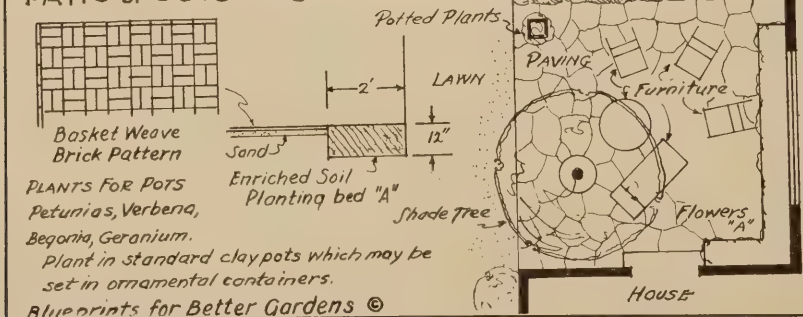
FOR AN OUTDOOR LIVING ROOM



Plants are for an "outdoor living room" what pictures and draperies are indoors. Vines on trellises, tall slender shrubs, hanging baskets, portable plantings set in pots, tubs, etc., can be used in whatever way they best adapt themselves to your general scheme. Ground plantings at the borders of the outdoor living space form the base of the decoration. Moveable potted or tubbed material gives the "occasional" touches and provides continual and replaceable bloom-color.

Unless your outdoor living room is paved or flagged, your lawn is your "rug." (See page 2 for advice on lawn.) Trellised vines can be used either as permanent plantings, or vines can be set in boxes, and shifted as circumstances demand.

"PATIO" or OUTDOOR LIVING ROOM



PHLOX DRUMMONDI (a) Grp. 2

Well branched plants with large clusters of many beautiful round-petaled flowers which grow about 1 inch across. Varied colors and color combinations.

Mixed Shades. **Pkt. 15c.**

Gigantea Art Shades. The individual flowers of this type are large and borne most freely in massive trusses on strong, upright plants. Excellent for borders and beds as well as for cutting. **Mixed colors only.** **Pkt. 25c.**

PINKS

Dianthus (a and p) Grp. 2 and 5

Plant in full sun in any good garden soil. Sow in spring when danger of frost is past.

Dianthus—Sweet Wivelsfield (a) Grp. 2. This annual has a great variety of color and long blooming season. Magnificent bedding subject. **Single Mixed.** **Pkt. 15c.**

Heddewigi Gaiety (a) Grp. 2. The best annual garden pink. The large fringed flowers have a bewildering variety of pink, white, red and maroon coloring, in decorative patterns on dwarf plants. Double and semi-double forms. **Pkt. 25c.**

Heddewigi Double (a) Grp. 2. 10 inches. Very desirable pink in many color combinations for rock garden or borders. **Pkt. 10c.**

Dianthus plumarius (The Cottage Pink or Grass Pink) (p) Grp. 5. Lacinated, fragrant "pinks" in shades of rose and white on stems to 1½ feet high. Forms a dense mat of narrow leaves. Very hardy and long living. A garden favorite the world over. **Double.** **Pkt. 10c.**

*Something old
Something new in* **FLOWERS**



DELPHINIUM, PACIFIC GIANTS



MORNING
GLORY
DARLING



PRINCESS
ASTERS



COSMOS, FIESTA
All-America Selection 1952



PORTULACA

1953
*All-America
Selection*



Plant Color in Your Garden...



SNAPDRAGON, TETRA ROSE



ZINNIA
PEPPERMINT STICK

See
Complete List of
Annual and Perennial
Flower Seed
on Pages 3 to 15



A Planting of French Dwarf Marigolds, Petunias and White Alyssum



PETUNIA, FIRE CHIEF

POPPIES, Papaver

Poppies have long been favorites. All are easily raised from seed which should be sown where the plants are to remain, later thinning to 8 or 12 inches between plants. In the North, sow in the open ground as early as possible in the spring; in California, sow from October to March.

Oriental Poppies (p) Grp. 5. Hardy plants with numerous leafy stems about 2½ ft. Large showy flowers. **Mixed. Pkt. 25c.**

ICELAND POPPY (p) Grp. 5. (Nudicaule). Hardy. Slightly resembling Shirley.

Art Shades. Large flowers, beautifully fluted and soft-textured, on long, wiry stems in lovely pastel apricot, cream, gold, biscuit, pink, white and various shades of rose. Magnificent cut flower. **Pkt. 25c.**

SHIRLEY (a) Grp. 1. Charming plants with their deeply cut foliage, slender, hairy stems and silky petaled blossoms, often fluted. Present a gay, airy picture. Height, 18 inches. **Pkt. 15c.**

Shirley Double Mixed. Full double and semi-double flowers in a great variety of colors. **Pkt. 15c.**

Sweet Briar (Double Annual Shirley). Full, double begonia-like flowers of a beautiful deep rose pink. One of the finest strains. **Pkt. 25c.**

CALIFORNIA POPPY

Eschscholtzia (a) Grp. 1

Aurantiaca, Orange. The famous California Poppy. **Brilliant Mixed. Pkt. 10c.**

PORTULACA

Moss Rose (ra) Grp. 1

Brilliant hardy annual of easy culture; excellent for massing in beds, edging or rock work, thriving best in a light, sandy soil and a sunny situation. Brightest color. Height 6" to 10".

Double Mixed. Pkt. 25c.

Single Mixed. Pkt. 15c.

RESEDA, See Mignonette

SALPIGLOSSIS

Painted Tongue (a) Grp. 2

For delicate grace, richness of coloring, and velvety texture, the regal salpiglossis has practically no equal. From a low base of leaves rise slender wiry stalks with Lily-like flowers in a magnificent range of colors. Height, 1 to 2½ feet. **Superb Mixed. Pkt. 15c.**

SALVIA, Flowering Sage

Scarlet sage is usually treated as an annual. Start the seed from January to May, and set out plants when weather is warm. Perennial in mild climates.

Bonfire Grp. 4. The crimson spikes grow erect above the foliage, forming handsome globular bushes. **Pkt. 25c.**

SCHIZANTHUS, See Butterfly Flower

SCABIOSA

Pin Cushion Flower (a) Grp. 2

(Not too good in very hot climates)
Imperial Hybrids. A much improved Blue Moon type flower, entirely different from the existing Scabiosa varieties. Fully double, extremely large and deep. Petals broad and wavy, entirely eliminating the pin-cushion center; rich varied colors. Tall growing and very upright with long, wiry stems. Ideal for cutting. **Pkt. 15c.**

Blue Moon. Very large well formed fully double flowers of deep lavender blue. Upright habit, strong, wiry stems. A superb cut flower. **Pkt. 15c.**

Coral Moon. Represents the medium to deep salmon-pink shades in a newly emerging Scabiosa class. **Pkt. 25c.**

HARDY PERENNIAL VARIETIES

Caucasica (p) Grp. 5. Giant Hybrids (Isaac House Strain). Fringed and ruffled, shades of blue from lavender to dark blue; very large flowers. **Pkt. 25c.**

There is a Flower for Every Spot and Season...

FOR LIGHT SHADE

Aquilegia (Columbine)
Digitalis (Foxglove)
Nasturtium
Begonias
Pansy
Stock
Snapdragons
Nemophila
Petunia (Fringed and Ruffled)

FOR HOT and DRY PLACES

Portulaca
California Poppy
Shirley Poppy
Swan River Daisy
Zinnia
Marigold
Bedding Petunia

FOR EDGINGS

Low Growing Annuals
Ageratum
Alyssum
Bellis, English Daisy
Blue Cup Flower
Lobelia
Nemesia
Nasturtium, Dwarf
Pansy
Portulaca

FOR COVERING Annual Vines

Scarlet Runner Bean
Black Eyed Susan Vine
Canary Bird Vine
Ornamental Gourds
Morning Glory
Nasturtium (Climbing)
Sweet Peas

FOR FALL BLOOM

Sow in Summer

Make an additional sowing of these flowers in mid-summer for fall blooms.
Calendula
Candytuft
California Poppy
Dwarf Marigold
Phlox Drummondii
Sweet Alyssum
Zinnia, Lilliput

FOR

CONTINUOUS BLOOM Sow Every 3 Weeks

Alyssum
Calliopsis
Candytuft
Bachelor Button
Gypsophila
Mignonette
Shirley Poppy

SNAPDRAGON

Antirrhinum (a) Grp. 4

Snapdragons are fascinating flowers with interesting forms and colors. They are easy to grow and will bloom continuously until frost, supplying unlimited cut flowers. Ordinary good garden soil will produce fine Snaps either in full sun or semi-shaded spots. Sow outdoors when danger of frost has passed, or indoors six weeks earlier.

SUPER GIANTS, RUST RESISTANT

Alaska. Snow white, yellow lip. **Pkt. 25c.**

Campfire. Luminous scarlet. **Pkt. 25c.**

Cherry Rose. A distinct addition to the Snapdragon color range. Long straight stems with long spikes of large, well-formed flowers make this variety ideal for cutting. **Pkt. 25c.**

Copper Queen. Bronzy copper. **Pkt. 25c.**

Crimson. Fiery crimson. **Pkt. 25c.**

Paradise Rose. Rose pink. **Pkt. 25c.**

Rosalie. Rich deep rose with underlying tone of topaz or amber. Base branching. **Pkt. 25c.**

Yellow Giant. Deep yellow. **Pkt. 25c.**

Finest Mixed. Pkt. 15c.

TETRA. Largest flowered of all snapdragons, many individual flowers are ruffled. A superfine mixture including all the best snapdragon shades; orange, yellow, peach, canary bronze, orchid, crimson, scarlet, pink, white. Main spike 2½ feet tall with many laterals. Excellent for cutting. **Mixed. Pkt. 25c.**

STRAWFLOWER IMMORTELLE

HELICHRYSUM (a) Grp. 2. The finest of all Everlastings. They make unusually fine winter bouquets if cut when partially opened and dried slowly in a dry place, heads downward to keep the long stems straight. The centers of the double pom-pom-like flowers are nearly covered by the stiff overlapping "petals." A wide range of brilliant and soft colors. Height, 2 to 3 feet. **Finest Mixed. Pkt. 10c.**

STOCKS, Gilliflower (a) Grp. 4

These popular flowers are easily grown and highly fragrant. The Giant Imperial class are half-hardy annuals. Stocks are biennials, but if sown in early spring will bloom the same year. In California Stocks are popular winter annuals.

Double Large Flowering Dwarf Ten Weeks. A wonderful strain for bedding. **Pkt. 10c.**

Beauty of Nice. It follows the Ten Weeks class in bloom. The plants are pyramidal in shape, branching above the base. Excellent for bedding, cutting. 16" high.

Finest Mixed Colors. Pkt. 15c.

GIANT IMPERIAL. Long stems and imposing spikes of large flowers make this the outstanding variety. It is about as early as Beauty of Nice and resembles it in habit, except that the plant is less spreading and taller. Height, 2 feet.

Yellow (Buttercup). Pkt. 25c.

Blood Red. Pkt. 25c. Lavender. Pkt. 25c.

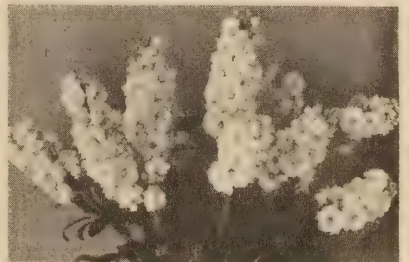
Rose. Pkt. 25c. White. Pkt. 25c.

Finest Mixed Colors. Pkt. 15c.

EVENING SCENTED STOCKS

(a) Grp. 3

Matthiola Bicornis. The flowers are small, mauve colored, similar to the Virginian Stocks but are delightfully fragrant toward evening. They are especially sweet after a rain. **Pkt. 10c.**



BASE BRANCHING STOCKS

SWEET PEAS



Sweet Peas are deep rooting and heavy feeding plants. We recommend a trench to be dug about 18 inches deep and 18 inches wide. In the bottom fork in about 6 inches of well-rotted manure. Fill in with soil in which is mixed a liberal quantity of well-rotted manure.

Sow the seeds in a trench 6 to 8 inches deep. Cover about 2 inches and fill in the trench as the plants grow. Use one ounce of seed to 20 feet of row and thin plants to 4 or 5 inches apart. Fall sowing gives finer flowers and longer stems and a slightly longer period of bloom.

If flowers are kept picked and seed prevented from forming, more and better blooms will be produced. Avoid overhead watering as it causes the flower buds to drop.

In California, Early Flowering varieties are sown about August 1 and throughout the winter months. If sown in August they will bloom by November. Keep the surface of the bed cool by using a light mulch.

SPENCER SWEET PEAS All Colors: Pkt. 10c; oz. 65c

PINK AND ROSE SHADES

Patricia Unwin. Salmon pink on a cream ground.

Pinkie. Rose-pink with large and frilled flowers. Seldom affected by weather. First-class blooms can be cut all during its long blossoming period.

Monty. Rich pink on white ground.

Radar. New. Best rich salmon-pink.

LAVENDER AND BLUE SHADES

***Ambition.** Rich deep lavender with a darker shade on the base of the standard and wings, lessening as the bloom ages.

Flagship. Deep navy blue.

Mable Gower. A brilliant blue without any lavender touch.

WHITE AND CREAM SHADES

Gigantic. An enormous white frilled flower of exquisite texture and artistic form. Black seeded.

Cream Gigantic. Large ruffled flowers of perfect form, free from pink or bluish tinge. Black seeded.

ORANGE AND SALMON SHADES

Prince of Orange. Best deep orange.

Smiles. Clear glistening salmon best describes this exquisite variety. The large flowers are beautifully waved and fluted.

RED SHADES

Red Boy. Deep crimson; an abundance of velvety flowers on long stems.

Welcome. By far the best and most brilliant, dazzling, scarlet Sweet Pea. For exhibition or gardens it is supreme. Absolutely sunproof.

CERISE SHADES

Mrs. A. Searles. Salmon-cerise, emerging into a soft oriental red. A remarkable and distinct color.

Mollie. Cerise with touch of orange.

MAROON AND PURPLE SHADES

Warrior. Rich chocolate maroon. A magnificent variety which has held its place and popularity for a number of years.

Olympia. Deep rich purple of graceful form and immense size.

CHOICE MIXTURE—Pkt. 10c; oz. 50c

Giant Waved Spencers Choice Mixed

This mixture is grown from a special formula which has been built up and perfected during many years. It contains over forty of the very best standard varieties of the most recent introductions, all waved and giant flowering. **Pkt. 15c.**

THE NEW CUTHBERTSON SWEET PEA

All Colors: Pkt. 10c; oz. 65c

Where other types do not perform well, Cuthbertsons are the answer, especially in hot and dry areas. They are very rugged, producing tremendous blooms on long stems and are ten days earlier than Spencers. Cuthbertson Sweet Peas are now available in a complete color range. They are vigorous under all conditions.

Carol. Clear pink.

Coline. Cerise.

Danny. Navy blue.

Frances. Lovely salmon.

Frank G. Lavender.

Helen. Silver pink.

Catherine. Clear cerise.

Janet. Pure white, black seeded.

Jimmy. Dazzling bright scarlet.

Kenneth. Rich crimson.

Lois. Rose pink.

Marion. Cream.

Tommy. Clear light blue.

Cuthbertson's Mixed Blend. An excellent range of 25 to 30 colors, well balanced. **Pkt. 15c.**

SUNFLOWER

Helianthus (a) Grp. 2

Sun Gold. New. Large double flowers of brilliant golden yellow. Free flowering. **Pkt. 10c.**

Red Sunflower. Tall single flowered variety with bright red blossoms. **Pkt. 10c.**

SWEET SULTAN

Centaurea Odorata (a) Grp. 2

These beautiful long stemmed flowers with their soft velvety heads make very enchanting bouquets. They measure 2 to 2½ inches across while the entire plant stands about 2½ to 3 feet tall. You can grow them readily in any garden soil. Red, lavender, rose, yellow and white. **Fragrant. Mixed. Pkt. 10c.**



SWEET WILLIAM

SWEET WILLIAM

Dianthus Barbatus (b) Grp. 5

A well known, attractive, free-flowering hardy biennial, producing a splendid effect in beds and borders with their rich and varied flowers. Height, 10 to 20 inches.

Single Varieties. Mixed. Pkt. 15c.

Double Varieties. Mixed. Pkt. 15c.

TITHONIA (a) Grp. 1

***Torch** (All America Winner 1951.) This extremely dwarf Tithonia grows approximately four feet high in most localities. It bears brilliant orange-red flowers, four inches across, from about July to mid-August. Very heat-resistant and not subject to any diseases. **Pkt. 25c.**

SOME TIPS ON WINDOW BOXES



Window boxes are a form of "house plant" with the difference that varied forms of plant material are used in the same window box, while house plants usually are by

themselves. The window box is often a "community" of plant material. See that what you put in the community is congenial to the other members in its requirements for water, food, light, type of soil, etc. Don't put plants requiring lots of moisture and fertilizer into the same window box with "poor soil" or "scanty water" types of plant. Don't put shade-loving plants into the same window box with sun-loving plants. If your window box or planter is indoors, treat it as a group of house plants; if it's outside treat it as a portable outdoor garden. Always remember, it is a crowded community and will need regular supply of good liquid fertilizer.

VERBENA (a) Grp. 4

One of the most popular annuals for beds and massing. Make a gorgeous display from July until frost. Height, 6 to 8 inches.

Floradale Beauty. Bright rose-pink to deep rose-red of exceptional brightness. Individual florets of perfect form. Pkt. 25c.

Spectrum Red. Huge, vivid crimson flowers. Pkt. 25c.

Sutton's Blue. Well rounded flowers, balls of deep royal blue. Pkt. 25c.

Hybrid Grandiflora Giant. Mixed. Very large flowers in lavender, white, pink and rose-red. Pkt. 15c.

VIOLA, Tufted Pansies (a) Grp. 4

Our Gay Mixture. This blend of bright gay colors far surpasses any mixture of Violas we have seen. Bright shades of self colors of red, yellow, blue, and apricot combined with many shades which are blotched, undoubtedly make these Violas a supreme mixture. Pkt. 25c.

WALLFLOWER

Cheiranthus (p and b) Grp. 5

English Wallflower (p). Spring blooming low erect perennial, in appearance much like stocks but flowers include yellow, yellow-brown, red and almost black. Sweetly fragrant. Plant in fall for early spring bloom. May be sown early in March for bloom the first year but fall planting gives better plants. Pkt. 15c.

Siberian Wallflower (Cheiranthus Allioni) (b). Upright spikes bear numerous four-petaled flowers of dazzling rich orange. Flowers the first season from seed and when established will bloom all summer. Height, 1 foot. Single. Pkt. 15c.

ZINNIA (a) Grp. 1

One of the most showy and satisfactory of our hardy annuals for beds, mixed borders and for cutting purposes. Easy to grow in any good garden soil. They commence flowering early in summer and continue until frost.

LARGE FLOWERED ZINNIAS. 3 to 4 feet high, with long stems which make the flowers fine for bouquets. The blooms are large, flat and very graceful.

Separate Colors. Pkt. 15c.

Canary Bird. Rich canary yellow.

Crimson Monarch. Very large, deep crimson.

Dream. Deep rose lavender.

Eldorado. Salmon apricot.

Exquisite. Light rose with deeper rose center.

Oriole. Orange and gold.

Will Rogers. Lovely deep scarlet.

Cherry Queen. Brilliant cerise.

Miss Willmott. Soft pink.

Purity. Largest and best white.

DOUBLE DAHLIA FLOWERED. 2½ feet. Enormous double flowers are produced on robust branching plants. Crisp, fresh appearance.

Mixed Pkt. 15c.

FANTASY. A new Zinnia type. Shaggy, medium sized flowers. Plant 2½ to 3 ft. high. Free blooming. Excellent cutting. **Mixed Shades.** Pkt. 15c.

RED RIDING HOOD. 1 ft. Of compact form, covered the entire season with double scarlet flowers not over an inch across. Effective in borders. Pkt. 15c.

SUPER CROWN OF GOLD, Pastel Tints. Large, well-formed flowers in a wide range of pastel shades, including soft

WATER AND WEED CONTROL

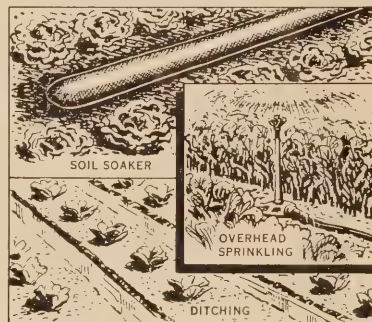
Weeds waste both water and the plant food that you put into your garden. Evaporation also wastes water. To get weeds out and water into the soil of your garden or of your lawn is good economy. Chemical weed killers take much drudgery out of your weed control, especially in the lawn. Weed control in garden areas can be simplified by chemical weed killing BEFORE planting and by maintaining a mulch on the surface of the garden. Marginal weeds that crowd against plants can be kept out by routine hand work. Peat, sawdust, lawn cuttings give a good mulch, which can be spaded into the ground later. Light raking of the ground, after rain or irrigation maintains a dust mulch and keeps weeds down.

GROUND WATERING in trenches, or with soil soakers gets water into the ground in vegetable and flower beds. SPRINKLING is the most feasible for effective lawn watering. Check with a trowel in the ground and see that irrigation is deep enough to serve plant roots instead of mostly evaporating from the surface. This goes for both flower beds and lawn areas, although evaporation loss from the lawn cannot be wholly avoided. Where lawn or other planting is under trees, drive holes and give water enough for BOTH tree roots and for plants—also fertilize for

BOTH. Don't water with sprinkler during full sunlight, except on lawn. Moisture on foliage in full sun tends to burn. Ground watering can be done at any time.

* * *

WEEDS grow and reproduce faster, as a rule, than garden plants. Control rests to a large degree upon getting the weeds beaten before they can scatter seeds. Mulching, or regular surface cultivation, keeps down new seedlings. If possible keep lawn weed from maturing seed. If they are seeding, mow with a catcher and destroy.



NOVELTIES

PEPPERMINT STICK. UNLIKE ANY ZINNIA ON THE MARKET today! Peppermint Stick has a wide color range—red and white, red and yellow, pink and white, orange and yellow and purple and white. It is one of the best cut-and-come-again Zinnias. Blooms will be produced until frost if kept picked. Approximately 70% of the flowers are striped. Early. **Mixed. Pkt. 25c.**

***PERSIAN CARPET.** Like tiny dahlias, each with its pointed petals tipped with contrast, these perfect miniature Zinnias make ideal garden edgings. The dwarf plants begin blooming early, growing into tidy, well-behaved 12" mounds of brilliant shades of yellow, orange and maroon, each plant different. They have cutting stems, and dainty foliage. Perfect in size for window boxes and apartment gardens. Easy to grow, thriving on heat. A wealth of bloom with minimum care. Pkt. 25c.



ZINNIA, PERSIAN CARPET

yellow, old gold, light pink, various shades of salmon, peach, and buff, cerise, white, and cream, each petal overlaid at the base with deep golden yellow. Borne profusely throughout the season on strong, robust plants. **Mixed shades. Pkt. 15c.**

DOUBLE LILLIPUT. 15 inches. A charming dwarf which is excellent for low borders or edgings. The plants are of tidy habit and produce a bounteous supply of very double pompon flowers about 1½ inches across in bright pastel shades. **Mixed. Pkt. 15c.**

TOM THUMB. Compact, 6 to 8 inch high plant, covered with well-formed lilliput flowers. Available in wide color range. Excellent for pots and borders. Pkt. 15c.

LINEARIS. This little Zinnia is most unusual and interesting. The numerous flowers are single and of a lovely shade of golden orange, with a delicate lemon yellow stripe through each petal. Height, 8 to 10 inches. Pkt. 15c.



ZINNIA, TOM THUMB

PETS AND PET SUPPLIES AT DUTHIE'S

BIRD SUPPLIES

PETPAK LINE

Vitamin Song Seed	35c
Parakeet Seed	29c
Egg Cubes	29c
Marvel Song Food	35c
Conditioner	35c
Keet Treet	35c
Mineral Bird Grit	20c
Baby Bird Food	35c
Mating Food	35c
Nesting Hair	10c
Wire Nests	15c
Bird Bitters	35c
Iron Tonic	35c
Bird Salve	15c
Constipation Medicine	25c
Diarrhea Remedy	25c
Charcoal	15c
Moulting Food	35c
Parakeet Bell Toy	15c
Vitamin Bird Bell	15c
Cage and Aviary Spray	35c
Mite and Lice Powder	15c

DUTHIE'S QUALITY SEED

Only the best seed available is used in our own tested mixtures.

No. 1 Canary Mix. Contains canary, rape, conditioner, treat, song seed. 30c lb.; 4 lbs. \$1.10

No. 2 Canary Mix. Canary and rape. 25c lb.

Parakeet Mix. Millet, canary, groats. 25c lb.

Duthie's Treat. 11 of the best treat seeds. A real treat and conditioner for canaries and parakeets. 4 oz. 25c; lb. 75c

Parrot Mixture 45c lb.

Canary Seed 25c lb.

Rape Seed 25c lb.

Millet 20c lb.

Petamine. Wonder food for all cage birds. 5 oz. 35c; 2 lbs. \$1.30; 5 lbs. \$2.65

Breeder Prices on All Seeds on Request

Complete Line of CROWN and HENDRIX BIRD CAGES

DOGS — HAMSTERS ODDITIES

DOG and CAT FOOD

DOG SUPPLIES

We handle a complete line of
Collars—Harnesses—Dishes—Dog Toys
and Remedies

TROPICAL FISH

You also will find at Duthie's a
complete line of

TROPICAL FISH—FISH FOOD

FISH SUPPLIES

Aquariums of different styles and sizes
Aquarium Supplies

Sunlight
THROUGH
R-V-LITE
All Purpose WINDOW MATERIAL
MAKES CHICKS BIGGER STURDIER HEALTHIER

R-V-LITE CHICK
UNDER GLASS CHICK

DOZENS OF USES ON EVERY FARM

- Over 60% of the Sun's life-giving "Vitamin-D" Rays pass freely thru R-V-LITE, scarcely 1% thru common glass.
- Ideal for poultry houses, farm buildings, hot and cold bed frames, sunporches, storm doors and windows.
- See your hatchery, feed, seed, lumber or hardware dealer.

NELSON WATER BOWLS



Packaged 40 ft. in carton
with clips and instructions.
Easy to install.

40 ft. \$4.98



TRIM AS YOU MOW!

No-See Grass Barrier is installed flush with the soil. You mow right over it, trimming edge neatly. Practically invisible from lawn side. Mulching is easier too, since the steel edging guides mulching tool.

NO-SEE GRASS BARRIER

Trade Mark

The barrier that keeps grass from
spreading!

ELIMINATES GRASS TRIMMING, KEEPS LAWN EDGES NEAT: Install this long-lasting, corrugated, galvanized edging along flower borders, fences, hedges, driveways; around trees and shrubs. Keep grass out of cultivated areas; gives your lawn that well-tended appearance.

No-See Grass Barrier lasts for many years. Can be bent easily to follow graceful curves of flower beds. Comes in easy-to-handle 26-inch lengths, 4 inches deep which key together with special clips.





DEPENDABLE PEST CONTROLS FOR HOME AND GARDEN

A **BUG-GETA** Pellets—Kills Snails, Slugs, Cutworms—handy, easy to use. Economical metaldehyde-arsenical bait in pelleted form. These pellets are easy to distribute in "hard to reach" areas and go 4 times further since they hold up longer than old style meal bait mounds.

OR 100—12 oz. Box
OR 101—2 lb. Box
OR 102—5 lb. Box
OR 103—25 lb. Bag

B **BOTANO** deluxe—the finest multi-purpose dust on the market. Contains 2 potent insecticides, lindane and methoxychlor, and two well-proved fungicides. Look at its uses:

GENERAL FOLIAGE DUST FOR FLOWERS AND VEGETABLES

- BOTANO** deluxe is fine on foliage and kills a wide variety of sucking and chewing insects such as Aphids, Thrips, Mealybugs, White Flies and many chewing insects such as Beetles, Caterpillars, pear and cherry Slugs, etc. It also controls Powdery Mildew, Black Spot and Rust.
- Soil Insects:** Wireworm, Seed-Corn Maggot, Diabrotica Larvae: Treatment: Dust 8 ounces in top soil for each 160 square feet of area. Treat Strawberry Root Weevils on Strawberries, Camellias, Rhododendrons, Azaleas, Primroses, Ornamentals in the same manner.
- Earwigs**—Dust heavily in all frequented areas. **BOTANO** deluxe acts as a contact poison and two to three treatments a season will usually suffice.
- Lawn Moth** (sod webworm).—Dust one lb. of **BOTANO** deluxe per 1000 sq. ft. of lawn area and soak into the lawn. Use 2 or 3 such treatments per season.

OR 104—1 oz. Duster
OR 131—1 lb. Refill
OR 105—2 lb. Refill
OR 106—5 lb. Refill

C **ORTHO-GRO** Liquid Plant Food—Simple as watering—this new way to fertilize gardens. New **ORTHO-GRO** balanced fertilizer contains organic fish, is easy to apply and plants respond quickly. Use all season long—a complete food for all plants. Economical—1 qt. makes up to 80 gals. fertilizer.

OR 107—5 lb. Box
OR 108—10 lb. Box
OR 109—25 lb. Bag

D **ISOTOX** Garden Spray—Economical, modern multi-purpose spray containing the sensational new lindane insecticide. Effective general foliage spray against Aphids, Thrips, Beetles. Use on Roses, Camellias, other flowers and shrubs against many chewing and sucking insects. Control Wireworms, many soil pests, also Earwigs, Lawn Moth, (Sod Webworm), Flies. Has very broad usage.

OR 110—2 oz.
OR 111—4 oz.
OR 132—8 oz.
OR 112—Pint
OR 113—1/2 gallon

E **ORTHORIX** Spray—Astounding new fungicide for year round use. Controls Mildews—Rose mildew, Peach leaf curl, San Jose Scale and many other plant pests! For both foliage and dormant spraying of flowers, fruits, ornamentals and berries. Excellent soil corrective. Contains remarkable wetting agent that makes every drop highly effective. Here's what John Paul Edwards, eminent rose grower, says, "I was able to completely control powdery mildew on my roses and produce plants with outstanding luxuriant green foliage and an abundance of blooms . . . simply by use of **ORTHORIX** Spray."

OR 133—4 oz.
OR 114—pint
OR 115—quart
OR 116—gallon
OR 117—5 gallon

F **TRIOX**—Here's what you've been looking for to get rid of those weeds on driveways, curbs and gutters, paths, brick or gravelled walks, tile patios . . . or along fences and around the garage and similar structures. Kills weeds, poisons soil and prevents plant growth 1 to 2 years! Do away with slow, back-breaking hoeing and grubbing. Kill weeds the easier, chemical way with **TRIOX**. Simply mix with water—apply with sprinkling can or sprayer. Economical.

OR 118—1 quart
OR 119—1 gallon

TRD. MKS. BUG-GETA, BOTANO, ORTHO, ISOTOX,
TRIOX, REG. U. S. PAT. OFF.



CALIFORNIA SPRAY-CHEMICAL CORP.

Prevent Dog Damage
to
Evergreens, Gardens, Shrubs, etc.
Amazing Liquid Chaperone keeps dogs, cats, other animals away from evergreens, flowers, gardens, even garbage pails and porches. Just spray on—you can't smell it, they detect it. Harmless. Economical.

FOR INDOORS
Powder Chaperone protects chairs, etc. Pkg. \$1
Kitty Chaperone keeps cats from clawing. Pkg. \$1



BIG 8 oz. Bottle \$1
Qt. \$3—Gal. \$8

LIQUID Chaperone

Handy Speedy PLANT TIE

TWIST-EMS

Strong, dark green "invisible" tapes with wire reinforcing protect stems, speedily and permanently support annuals, perennials, vines, shrubs, and vegetables.

Box of 200, 4-inch size25c
Box of 100, 8-inch size25c
Box of 100, 16-inch size50c
Pkg. of 50, 8-inch size15c
Pkg. of 35, 8-inch size10c
250 ft. continuous roll \$1.00



New Weatherized

TRELLIS NETTING TRAIN-ETTS

Ideal support for SWEET PEAS, GARDEN PEAS, POLE BEANS, CUCUMBERS, TOMATOES. Hung in 5 minutes. Doesn't rot like string, nor burn ten-drills like wire.

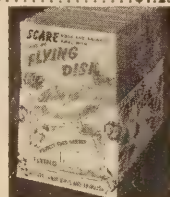
60-inch x 72-inch 65c
60-inch x 96-inch 85c
60-inch x 180-inch \$1.25



FLYING DISK

Shiny, whirling disks of aluminum—to scare birds and animals away from planted areas, berries, trees, etc.

Pkg. of 10 Flying
Disks, 25c



Bothered with RATS?

Ralphs MAR-DED

Sweeney's RAT KILLER
or **WARFARIN**

will get rid of them for you

Gardening Is More Fun if You Wear

WOLVERINE GLOVES

Tough Yet Pliable

HOMKO LAWN SWEEPER

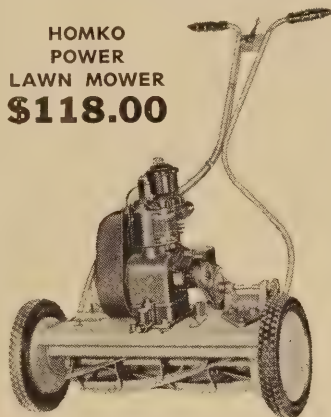
- **BE MODERN**—groom your lawn with the LS-240 Lawn Sweeper. This is the modern way to clean lawns and parkways.
- **A RAKE IS SLOW**, tears out the grass, misses grass clippings, acorns, and stones. The LS-240 Sweeper sweeps clean, picks up leaves, grass clippings, twigs, stones and acorns. Holds approximately six bushels before basket needs emptying.
- **THE LS-240 SWEEPER IS NOT ONLY A LEAF RAKER**—it's a season 'round necessity. Sweeps grass clippings clean—allows your lawn to breathe and your grass to spread with a rich, heavy, luxurious growth.
- **SWEEPS UP OBNOXIOUS WEED CLIPPINGS** so that they cannot seed and spread in your lawn.
- **HANDSOME APPEARANCE**, streamline design, beautiful harmonious finishes, floor models really draw attention.

HOMKO
LAWN SWEEPER

\$39.50



HOMKO
POWER
LAWN MOWER
\$118.00



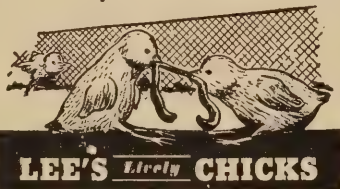
Ten Reasons Why

HOMKO POWER LAWN MOWERS ARE THE FINEST IN THE INDUSTRY

- Rigid all-steel "box type" construction.
- Extremely easy to operate. No levers or gadgets to manipulate.
- Finished in attractive colors.
- Reinforced extra heavy cutter bar with simple cutting adjustment.
- Handle swings upright for easy storage.
- Precision ground ball bearings shielded for dust protection. Oilite bearings in wheel.
- Gears of high tensile strength alloy . . . precision cast for long life.
- Massive rubber tired wheels with choice of Standard or Hi-cut tires.
- Cutting blades of top quality, fully tempered steel.

LEE'S LIVELY CHICKS

U. S. Approved Pullorum Passed
as Supervised by Oregon Department of Agriculture
Prepaid Prices — 100% Live Delivery Guaranteed



Write for Prices

ALL POPULAR BREEDS

AVAILABLE

DUTHIE'S Supreme Quality CHICKS

Hatched exclusively for us by
one of the leading hatcheries in
this section

LOWER PRICES
HIGHER QUALITY

Write for Prices!
AVAILABLE JANUARY TO JULY

MAKOMB

WORLD'S LARGEST BROODER BUILDER



SENIOR ELECT-O-STAT WITH FAN FORCED CIRCULATION

Elect-O-Stat fan forced circulation evenly diffuses the heat from corner to corner and takes less current. Fresh cool air is pulled down through the top ventilator. It moves across the Reflector, picking up any heat radiated through. It's blown over the element, then circulated outward and in part pulled back to meet and temper continual intake of fresh air. Control is by our time tried and proven snap action switch. Motor draws only 17 watts. Powered by 800 watt fully enclosed porcelain insulated element—thousands in use and not one reported defective.

Cat. No.	Price	Size	Area Covered	Capacity	Weight
C1-52	\$54.80	52" square	2704 sq. in.	385	66 lb.
C1-60	60.00	60" square	3600 sq. in.	515	80 lb.

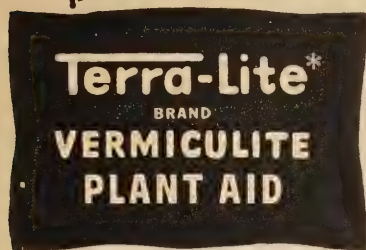
SMALL FLOCK ELECTRIC BROODERS

Two full powered electric brooders especially designed for the smaller flocks. They carry the same tried and proven dependable units as the larger models — are as dependable as any at any price. Dependable snap action automatic control, double sealed against dust. Powered by 500 watt—15" diameter element fully enclosed in tight die drawn case. Masonite insulated.

Cat. No.	Price		Size	Broods	Weight
C1-35	\$21.40	No diffuser	38" x 38"	200	26 lb.
C1-46	25.00	With diffuser	46" x 46"	300	37 lb.



it Grows Better with



all thru the year

Starting Seeds—For perfect air-moisture control and speedy healthy root growth and maximum seed germination.

Transplanting—Mixed in soil Terra-Lite reduces shock, speeds recovery, assures air and moisture for roots.

Rooting Cuttings—Amazing speed in developing root masses, easily removed without injury.

Mulching—Prevents drying out in summer, reduces heaving in winter. For bigger healthier plants sooner, use Terra-Lite all thru the year. Get Terra-Lite today.

**Terra-Lite is a registered trade mark.*

MOON SIGN BOOK



FOR YOUR GARDEN AND
YOURSELF

Customers recommend this Popular Daily Guide as the best book on this subject—Get in Harmony with Nature—It pays! **A mine of helpful information.**

In addition to much interesting matter it gives best dates for Farming, Gardening, Planting, Fishing, Poultry Raising, Business and Personal Affairs, etc., according to the **correct Moon Sign.** Sold on the publisher's unconditional guarantee, **money back if not satisfied.** 256 pages. Always the same price, **\$1.10 in the U. S. A.**

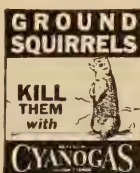
**CYANO
GAS**

(A Dust)

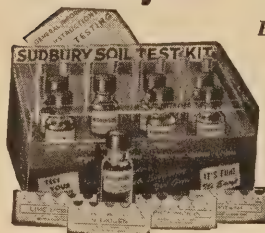
Kills moles, rats, mice
yellow jackets, ants, etc.

Ant size, 50c; 1 lb., \$1.00;

5 lbs. \$3.75; 25 lbs. \$12.50



Sudbury Soil Test Kits



**Better Results
Guaranteed
from
Everything
You Plant
Tells
What's Wrong
with
Your Soil!**

Tests for Nitrogen, Phosphorus, Potash and Lime
POPULAR GARDEN KIT (pictured) makes 50 tests. Handsome case, lucite top.....\$5.89
Small HOME GARDEN KIT.....\$2.98
LARGER KITS, IN STEEL CHESTS
HORTICULTURAL KIT—Makes 150 tests, enough for years of use.....\$14.95
SUPER deLUXE KIT—For farmers, florists or garden. Makes hundreds of tests....\$29.95

VIGORO Complete Plant Food

that supplies all 11 of the elements plants require from the soil. For finer gardening results, feed every thing you grow with Vigoro. It is clean, odorless, sanitary and the most economical plant food you can buy. Four pounds feed 100 square feet of lawn or garden area.

FOR LAWN, FLOWERS, SHRUBS,
TREES AND VEGETABLES.

1 lb. bag, 15c	25 lb. bag, \$1.85
5 lb. bag, 50c	50 lb. bag, \$3.15
10 lb. bag, 90c	100 lb. bag, \$5.25

f.o.b. Lewiston, Idaho

End-o-Pest

... supplies all the protection most gardens need from sucking insects, chewing insects and many types of fungus diseases.

EASIER LAWN SUCCESS
can be achieved with a
VIGORO SPREADER!

A size to meet every need. Economically priced. Designed to give years of service. Simple to operate.



LIGHTING FOR YOUR POULTRY HOUSE

Let Your Chickens Work While
You Sleep

COMPLETE LINE OF TIME SWITCHES

Morning Lighting Only

Model 4—A.M.....\$9.95

Morning and Evening with Dimmer

SP-30.....\$11.50

Same to Plug In

PIP.....\$13.50



CYCLONE SEEDER

Can sow 50 acres in a 10-hour day—seeded evenly, thoroughly and easily. Use any seed that can be sown broadcast or with ground bone, ashes or fertilizer. Its distribution will make three bushels do the work of four.

THE SOWER THAT SATISFIES

Each, \$4.30; postpaid, \$4.55

HORN SEEDER

OLD STANDBY

Adjustable for all types of seeding.

Each, \$1.60; postpaid, \$1.75



PLANTABBS make plants and flowers grow like magic! This rich PLANT FOOD in convenient TABLET form is ideal for potted plants, window boxes, all garden flowers, vegetables and shrubs. PLANTABBS are clean, odorless, easy to use. 30 tablets 25c; 75 tablets 50c; 200 tablets \$1.00; 1,000 tablets \$3.50.

FULTON'S

PLANTABBS

PLANT FOOD TABLETS PLUS B₁

HYPONEX PLANT FOOD

Grows Better Plants Faster
in SOIL, SAND or WATER

Simply dissolve and water all your houseplants, garden flowers, vegetables, shrubs, lawn. Produces more and larger flowers and fruit. Excellent for seedlings, cuttings, transplants. Clean, odorless. Won't burn foliage or roots if used as directed. Contains all nutritional elements—plus vitamin B₁. Feeds instantly.



1 oz. pkt. (packed 72 to case).... 10c

3 oz. can (packed 36 to case).... 25c

7 oz. can (packed 24 to case).... 50c

1 lb. can (packed 12 to case)....\$ 1.00

10 lb. drum, makes 1000 gals..... 8.00

25 lb. drum, makes 2500 gals..... 15.00

50 lb. drum, makes 5000 gals..... 25.00

100 lb. drum, makes 10,000 gals... 40.00

GARDEN FOR RESULTS

Destructive insects must be controlled and a definite spray program followed in order to do it.

We can sell you the best seeds, bulbs, plants and shrubs, but YOU have to control pests in YOUR own garden. We can only advise.

A free booklet is available to you titled "DeBugging Made Easy", which will help you plan. It describes many applications

for control of various types of insects and fungi using CARCO-X. It is a complete liquid spray, easy to use and not harmful to humans or warm-blooded animals when used according to directions.

One gallon makes up to 200 gallons of solution. Year 'round use will pay you dividends beyond your present expectations.

CARCO-X acts four ways: as a Soil Treatment, Repellant, Contact Insecticide and Fungicide.



Prices

1/2 pint	.....	\$1.00
1 pint	.....	1.50
1 quart	.....	2.45
1 gallon	.....	5.95

We suggest that you buy now and have it on hand to use at ALL TIMES.

HAYES SPRAY GUNS



Delivers a fine forceful fan-shaped spray. Adjustable nozzle sprays UP under leaves—DOWN—or SIDEWAYS—also a LONG-RANGE spray to reach tree tops. Attach to water hose—makes spraying easy—no pumping or heavy lifting. Properly proportions and thoroughly mixes insecticides in correct dilutions. HAYES 4—sprays 4 gallons of solution.

\$6.45

HAYES 6—sprays 6 gallons of insecticide solution—has elongated nozzle to reach inside plants.

\$9.95

PEAT MOSS

For Better . . . FLOWERS AND GARDENS use the weed-free PEAT MOSS

Bales	.....	\$4.00
Half Bales	.....	2.75
2 cu. ft. containers	.....	1.45
3/4 ft.	.....	.75

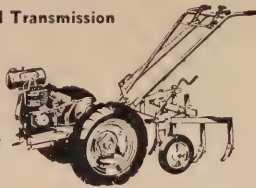
SIMPLICITY

Garden Tractors

4-Speed Transmission

2 Horse models

3 Horse models



THE No. 1 GARDEN TRACTOR OF AMERICA

Light, Economical, with Big Tractor Features

Just a Few of the Many Attachments:

- 24 -in. Lawn Mower
- 30 -in. Sickle Mower
- 6 1/2 -in. Plow with Coulter
- 12 -in. Disc
- 30 -in. Snow Plow
- 12 -in. Weeding Blades
- 4 -in. Hilling Blades

Many Other Attachments

Write for Prices

Wolverine Gloves

The Work Glove of Full Grain Horsehide. Triple Tanned by the Wolverine Secret Tanning Process

POULTRY REMEDIES

We Carry Complete Line of GEO. H. LEE CO. POULTRY SUPPLIES

Send for complete book and prices.

STOCK REMEDIES

Complete Line of HESS & CLARK STOCK REMEDIES AND POULTRY SUPPLIES

Send card for catalog and prices.

PET SUPPLIES

DOGS . . .

Collars, Harnesses, Leashes, Beds. Spratt's Dog Food and Remedies.

CANARY SUPPLIES . . .

Hartz Mountain Food and Remedies. Spratt's Bird Seed and Remedies.

Bird Cages and Stands, \$3.75 up

HOW TO CONTROL GARDEN PESTS

Insects and plant diseases. Controls AFTER pests have appeared are spraying and dusting with suitable insecticides and fungicides. BEFORE the pests appear, good gardening practices can make it harder for them to gain a foothold.

These practices are: Good cultivation, adequate fertilizing and irrigation coupled with good weed control. In spite of these measures, periods in each season bring certain pests in quantities that call for special spray, dust or baiting activities. You can gear your routine of pest control to your spare time and the size of your garden. Hand-operated spray or dust guns are adequate for the smaller areas. Mechanical dusters or sprayers may be necessary in larger areas where there is more planted material to be covered and protected.

All-purpose or dual-purpose sprays or dusts will take care of most of the pest control problem in a small place. In larger areas where larger groups of identical plant material attracts specific types of disease or insect, special types of material may be needed to get results.

INSECT PESTS are of two types. 1. Sucking insects. 2. Chewing insects. For sucking insects contact poisons are necessary for control; for chewing

insects stomach poisons. Slugs and snails while not insects, rank as "chewers" and are handled by poison baits, most of which are also charged with arsenical poisons to get earwigs, cutworms, and similar pests. Routine baiting, particularly in fall, midsummer and spring, usually will handle these garden enemies.

FUNGUS PESTS, of which mildew is most common, and which include rusts, blights, etc., are all treated with fungicide spray or dust. Routine preventive spraying or dusting to keep foliage and stems resistant to the fungus spores is best. Dusting or spraying after a fungous disease has attacked, will not restore foliage damaged already. It will, however, check spreading of the infestation. Some shrubby and weeds serve as breeding grounds for fungous pests. Weed-free gardens and clean hedgerows are good insurance against such things.

Have separate dust or spray guns for: 1. Insecticides. 2. Fungicides. 3. Weed killers. Then you won't risk damaging plants with the residue of some chemical that is not suited to the job you want to do. Very little weed killer residue in an insecticide or fungicide gun could kill flowers you are trying to protect from insect or fungous damage. Play safe in this job!

KNOW YOUR ENEMY

FUNGUS PESTS



POWDERY MILDEW ON PEAS, GRAPES, ROSES

BLACK SPOT



LEAF SPOTS, EARLY AND LATE BLIGHTS ON POTATOES, TOMATOES



RUST ON SNAPDRAGONS, HOLLYHOCKS, PEACH LEAF CURL

INSECT PESTS



BEETLES, CATERPILLARS, SNAILS, SLUGS, CUTWORMS



GLADIOLUS THRIPS, RED SPIDER, MEALY BUGS, WHITE FLY



CABBAGE WORM, FLEA BEETLE, LEAF HOPPERS, SPITTLE BUG



EARWIGS, 12 SPOTTED BEETLE (Diabrotica), APHIS, FLOWER THRIP

AND KNOW YOUR WEAPONS



In SPRAYING plants, care must be taken that not only the upper surface but also the underside of all foliage be reached where many insects deposit their eggs.

DUSTING has become the most popular way of fighting garden insects. Here, too, it is necessary to reach the underside of the plants to get at the hidden pests.



BAITING is used with good results especially against snails and slugs. If bait is used, scatter it evenly.

Consult our advertising section for reliable insect and fungus pest control products.

BLAST THE BUGS!

Protect Garden Beauty, Conserve Food with HUDSON SPRAYERS, DUSTERS



HUDSON "SIMPLEX"® PERFECTION®. The Higher the Pressure, the Tighter the Seal. Simplest, safest, most dependable compression sprayer ever made. Cover seals from inside of tank . . . pressure provides positive leak-proof seal. Holds 4 gallons. All-welded tank. 42" spray-proof hose. 5-spray nozzle adjusts to give fine to coarse spray and 20 ft. long-distance spray. Extra nozzle cap for flat fan spray. Roto-Valve permits spraying in any direction without twisting hose. Comfortable 1 1/2" wide adjustable carrying strap.

HUDSON CLIMAX®. Same advanced design with 3-gallon tank, single nozzle with 4 different spray discs.



<p>HUDSON FAVORITE® Compression Sprayer A beautiful, useful gift. Finest, lightest 1 1/2 gal. home sprayer. New Saf-T-Lok® for easy sealing, safer opening. 5-spray nozzle—extra fine to long-distance. 5-ft. plastic hose.</p>	<p>HUDSON LEADER® Compression Sprayer Premium quality materials and workmanship at attractive price. Safest screw top ever built into a compression sprayer. 3 1/2-gal. tank.</p>	<p>BUGWISER® and BOOSTER® Compression Sprayers Economical, efficient with seam-welded tank. Saf-T-Lok with easy funnel filling. Bugwiser: 2 1/4 gal., with 10" brass pump. Booster: 3-gal., 12" brass pump. 3 spray discs.</p>
<p>HUDSON IDEAL® Porta-Sprayer Gives 250 lbs. pressure; takes 2 leads of hose. 15 gal. tank, 10 ft. hose. Also Hudson Sunshine—200 lbs. pressure. Order with or without pressure tank; or with steel, cushion or pneumatic-tired wheel.</p>	<p>HUDSON MATADOR® Power Sprayer Pumps up to 4 gals. per min. at pressures up to 250 lbs. 20 ft. spray-proof hose with full size power sprayer gun. 15-gal. tank with 1 h.p. engine. 30-gal. with 1 1/2 h.p. engine. Wide cushion tires.</p>	<p>HUDSON ROTO-POWER® 806B Duster Delivers greater volume of air at greater speed than any other. Light weight aluminum. For any powder pesticide. Dust one or two rows, any direction. No. 801 is similar, in steel. Less capacity.</p>
<p>HUDSON ADMIRAL® Duster A beautiful gift with countless uses. Applies 1 qt. of any powder pesticide or weed killer. Nozzle dusts in any direction, high or low.</p>	<p>HUDSON NO. 428 CRITIC® With 2-Spray®. With nozzle pin right, gives fine mist; left, gives wet surface spray. Glass jar. Brass cap and nozzle pump and. MERCURY NO. 433. Also with 2-Spray, tin plate container.</p>	<p>HUDSON ECLIPSE® Every metal part all stainless steel. A beautiful lifetime sprayer for use indoors and out. 2-spray nozzle for fine mist or wet surface spray. A beautiful and durable gift.</p>

WOULDN'T ANY OF THESE MAKE BEAUTIFUL, USEFUL GIFTS FOR THE GARDEN LOVER?



ACP Rose & Floral Dust

Now, for the first time, complete protection with **one product!** ACP Rose & Floral Dust is a fungicide, insecticide, aphicide and miticide all in one. It contains Lindane, DDT, Ferbam, sulfur and the new chemical Ovotran, which eliminates mites that suck life sap from leaves. Use as dust or spray.

1-lb. canister \$1.49

ROOTONE plus Fungicide

Now you can root cuttings with your old dependable Rootone, the famous plant hormone powder, and at the same time protect them against damping-off and other soil-borne diseases. A "must" for successfully starting cuttings.

Trial packet 25c 2-oz. jar \$1



TRANSPLANTONE



Use Transplantone, the hormone-vitamin combination, to prevent wilting when you set cuttings or transplant grown plants. Save tomatoes, lettuce,

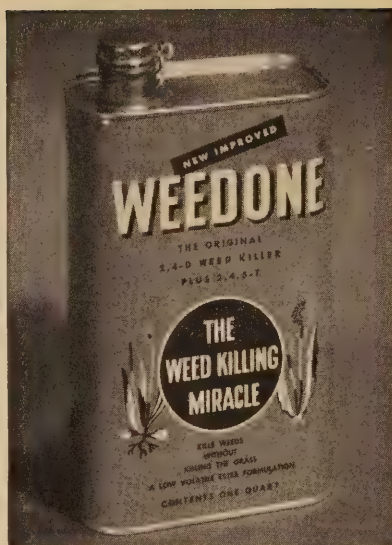
cabbages, peppers, zinnias, pansies, azaleas, evergreens from transplanting shock.

Trial packet 25c 3-oz. canister \$1

FRUITONE

Spray Fruitone, the fruit setting compound, on tomato buds at blossoming time, and each one will set more big meaty tomatoes. Treat limas and string beans, too.

Trial packet 25c 2-oz. canister \$1



Improved WEEDONE

The Weed-Killing Miracle

Weedone contains powerful 2,4,5-T, as well as 2,4-D. It's the butoxy ethanol ester weed killer which does not give off vapors injurious to nearby flowers, vegetables and shrubs. Weedone kills dandelions, platinains, Japanese clover, poison oak, wild blackberry and over 100 other weeds and woody plants. Here's one weed killer that never lets you down. Can be sprayed on growing and dormant plants.

8-oz. can \$1; 1-qt. can \$2.75;
1-gal. can \$6.95



WEEDONE PLASTIC APPLICATOR

Cap fits any screw-top gallon jug and makes handy 1/2-oz. measure. All plastic; no sharp edges to cut or scratch hands.

59c

WEEDONE[®] CRAB GRASS KILLER

... Chickweed, too!

Weedone Crab Grass Killer contains potassium cyanate — sure death to crab grass and chickweed, but harmless to people and pets. Applied in liquid form for better coverage. Does not kill desirable grasses and breaks down into a fertilizer to improve the soil.

6 1/2-oz. can \$1 26-oz. can \$3
6 1/2-lb. can \$8.85



ACP SOIL CONDITIONER

A great new 2-products-in-1 material containing the two best soil-conditioning chemicals (hydrolyzed polyacrylonitrile and the new modified vinyl acetate maleic acid compound), plus plant hormones and essential mineral elements, fertilizer.



May be used as a dust (as packaged) or mixed with water and applied with a sprinkling can.

ACP Soil Conditioner is properly formulated for improving and stabilizing soil structure. It will prove of great benefit when preparing flower and vegetable gardens, planting shrubbery, building a new lawn or repairing bare spots. Use it also for making potting soil for house plants.

With ACP Soil Conditioner you can change your clay soil to rich tilth as you cultivate. Simply apply to surface and cultivate as usual. The result is better moisture retention and soil texture. Also apply on seed beds and lawns after seeding to provide a topsoil mulch for faster germination.

Trial shaker canister \$1.00
2 1/2-lb. shaker canister \$3.35

GRO-STUF

A Concentrated Liquid Fertilizer

Now, in one product, you get all the proved chemicals **plus** the necessary trace elements and hormones that are needed to produce luxuriant, disease-resistant growth in trees, shrubs, vegetables, flowers, lawns. **Everything** in Gro-Stuf contributes directly to the growth of the plant—there is no "filler". And **everything** plant life needs to produce more abundantly and more beautifully will be found in Gro-Stuf. It pays to give your plants all the nourishment they need. Gro-Stuf is a complete 20-20-20 plant food.



1-lb. can \$1.25
4-lb. can \$3.75

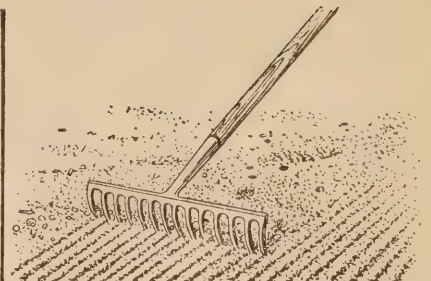
12 STEPS TO A SUCCESSFUL VEGETABLE GARDEN



Before you start to plant, sit down with pencil and paper and plan your garden to fit your space. Just two or three feet of row are enough for parsley, but allow lots of space for beans, corn, peas, and vine crops.



As you spade your garden, work in the compost you have been making, plus an application of Vigoro. The need for fertilizer is actually greater than ever if the compost is not completely decomposed.



Make a fine seed bed. The finished condition of your soil, with all clods broken and well pulverized, will make it possible to attain perfect stands of plants and help small seeds to make a good start.



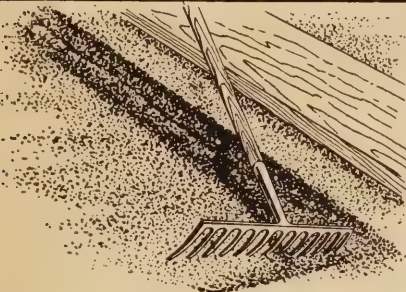
A string drawn tight between two stakes will help you make straight rows. Draw a line with a stick for shallow furrows, or with a hoe for deeper ones, depending on the kind of seed to be planted.

SOIL LEVEL	
0	ENDIVE, CARROT, ONION, PARSLEY, LETTUCE, PEPPER, MUSTARD, TURNIP
1/2	RADISH, SWISS CHARD, BEET, TOMATO, SPINACH, CABBAGE, CAULIFLOWER
1in	MELONS, CUCUMBER, OKRA, PUMPKIN, SQUASH, WATERMELON
2in	BEAN, CORN, PEA

Vegetable seeds should be planted at the depths indicated on the chart above. Some kinds should be just barely covered, while others, like peas, may be planted even deeper than indicated if soil is sandy.



Sow seed thinly, keeping in mind the distance apart which the growing plants should be spaced in the row. Plant somewhat heavier than final spacing, and thin out the excess plants while still small.



Draw the soil back into the furrow to cover the seed planted. Firm the soil over the seed by laying a board over the row and walking on it, or by tamping with the flat side of the rake.



Ditch irrigation in the vegetable garden reduces the weed problem and helps keep foliage diseases in check. Plant seeds at the edge of the ditch as illustrated, so moisture can reach them.



Additional fertilizer during the growing season is of great help for many garden plants. Corn, melons, onions, celery, and squash particularly respond to this mid-season "spot" fertilizing.



The principal reason for cultivation is to kill weeds. It's not necessary or desirable to stir the soil deeply. Cultivate just deep enough to cut off the weeds without disturbing the roots of the garden plants.



It's not hard to keep pests under control if you make a daily inspection of your garden. Begin spraying or dusting at the first sign of damage—don't wait until the plants are seriously injured.



Many crops like cucumbers and beans and many flowers like carnations and sweet peas will stop bearing if the fruit or flowers are not picked constantly. Daily picking lengthens the season a great deal.

FIELD SEEDS... Write for Our Competitive Prices

ALFALFA

Sow 12 to 15 pounds per acre

Ranger. A hardy Northern variety adaptable throughout the Northwest.

Common Alfalfa. Universally grown long-rooted variety. Adapted to deep soils.

Grimm Alfalfa. This is a very hardy and consistent producer. Recommended for all sections west of the Cascades.

Ladak Alfalfa. Ideally adapted to dry soils. Strongly resistant to freezing. Also gives good results under irrigation.

Buffalo. New hardy Northern variety, heavy yielder, rapid come back, very resistant to bacterial wilt.

BARLEY

Sow 100 to 120 pounds per acre

Hannchen Barley. Heavy yielding spring variety, medium early, white, two row, bearded type.

Trebi Barley. Spring. This is a six-rowed bearded, hulled barley adapted to irrigated conditions.

White Hulless or Bald Barley. (Beardless). Early spring. Threshed, it's like wheat.

BUCKWHEAT

Sow 50 to 60 pounds per acre

Japanese. This is the largest growing buckwheat. Makes a more vigorous and larger growth than the common kind.

Silver Hull. The kernels are gray and are much smaller than the Japanese variety. They are very plump and heavy.

CLOVER

Alsike. Very hardy, adapted for sowing on cold, wet land. Planted at the rate of 8 to 10 pounds per acre, it yields a large amount of hay or pasture and is a good bee plant. A good short rotation legume.

Ladino Clover. A large form of white clover, making a growth of 8 to 12 inches. Perennial. Can be grown on rather shallow land where well supplied with humus and moisture. 4 to 6 pounds per acre.

Lotus. Two primary species, *Corniculatus* and *Major*. New legumes. Good pasture and hay plants. *Corniculatus* best adapted to dryer soils. *Major* best for low moist soils. Sow 4-5 pounds per acre.

Red Clover. Is excellent for pasture and hay. Will thrive in slightly wetter and more acid land than alfalfa. Sow 6 to 10 pounds per acre.

Strawberry Clover. Resembles White Dutch Clover, but spreads faster and lives longer. Free from insect and disease attacks. Best on alkali lands with plenty of moisture. Sow 6 pounds per acre.

White Dutch Clover. Hardy creeping clover, adaptable to a great variety of soils and climates. Sow 6-8 lbs. per acre.

White Sweet or Bokhara Clover, Biennial. Excellent for pasture and hay. More drought-resistant than alfalfa. Thrives on light alkali soil. Good soil improver.

Yellow Sweet Clover, Biennial. About two weeks earlier than the white. Produces high quality hay. Good soil improver. 12 to 15 pounds per acre.

FIELD CORN

We carry Hybrid seed Corn adapted for this area.

FLAX FOR SEED

Flax may be grown with good success in the West. It matures quickly and may be planted as late as the middle of June. Yields 10 to 20 bushels per acre. Sow 42 pounds per acre.

GRASSES

Alta Fescue. Long lived, hardy, heavy forage grass, stays green during dry periods because of deep rooting system and adapted to wide range of climatic and soil conditions. 16-20 pounds per acre.

Bromus inermis (Awnless Brome Grass). Excellent grass for the Northwest. Sow 25 to 30 pounds per acre.

Common Rye Grass. Annual similar to Italian, excellent spring and fall pasture. Sow 20 to 25 pounds per acre.

Crested Wheat Grass. Valuable for the West and thrives well in semi-arid sections, too. Sow 10-15 pounds per acre.

Kentucky Blue Grass. This is an excellent grass for pasture for all kinds of stock. It is very hardy. Sow 20 to 25 lbs. per acre.

Meadow Foxtail. An excellent wet land grass. Most palatable of all grasses. Sow 12 pounds per acre. Not a weed.

Mesquite. Used on burned over, virgin soils. No cultivation is necessary. Sow seed at the rate of 15 pounds per acre.

Moistland or Meadow Foxtail. A rugged grass, ideal for moist, low lying ground. Sow 1 pound to 175 square feet.

Orchard Grass or Cocksfoot. Valuable alone or mixed with other grasses. Broadcast seed at the rate of 20-28 pounds per acre on well prepared soil.

Perennial Rye Grass. A strong growing, hardy perennial grass, noted for its nutritive qualities. 25 to 30 lbs. per acre.

Red Top. A good, permanent grass valuable for moist soils. It should be grazed close. Sow 10-15 pounds per acre.

Sudan Grass. An excellent annual drought resisting forage plant. All stock relish it. Sow in spring. 25 to 35 pounds per acre.

Reed Canary. A heavy yielding wet land grass. Good for hay, pasture and silage. Long lived. 12-16 pounds per acre.

Timothy. Very valuable for hay. Thrives best on moist, loamy soil. Sow early in the spring or fall. 8-10 pounds per acre.

Tualatin Meadow Oat Grass. An improved tall meadow oat grass.

MIXTURES

can be compounded to suit your needs. For dry soils, for heavy, non-irrigated land and for irrigated light or heavy soils.

OATS

Sow 60 to 80 pounds per acre

Clinton. A spring oat with a white plump kernel, straw that is relatively stiff and strong, good yielder and rust resistant.

Victory. Grain of medium size, short, plump, white, thin hull, nearly beardless. Heavy yielder. Straw stiff and firm.

Swedish Select. Kernel is white, large and plump, hull thin, and straw is stiff and strong. Does not lodge.

Gray Winter Oats. Usually hardy. Seeded in winter, fall or early winter. Sow in the spring for hay along coast.

FIELD PEAS

Austrian Winter Peas. Ideal forage legume for hay, ensilage or pasture. Will outyield vetches under many conditions. Sow 90 to 120 pounds per acre.

Canadian. Suited to late planting. Produces excellent forage. May be used for summer green manure crop. Requires considerable moisture. Sow 120 to 150 pounds per acre.

RYE

Sow 85 to 115 pounds per acre

Abruzzi. Fall seeded, hardy, excellent for cover crop and early spring pasture.

Spring Rye. Successful in poor soils where other grains fail. Makes early pasture and may be cut and cured for hay.

Winter or Fall Rye. For pasture and hay. May be sown in spring, summer or fall.

Rosen or Petkuser Rye. A winter variety rapidly becoming popular among growers.

RAPE

Dwarf Essex. Highly recommended as pasture for sheep, cattle, hogs. Splendid green feed for poultry. Plant 10 pounds per acre, in early spring.

VETCH

Sow 40 to 60 pounds per acre

Common Vetch. Valuable for forage and green manure. As a hay crop it is generally sown with oats or wheat to support the vines.

Hairy Vetch. Thrives on all soils. Makes good growth during the cold season.

Hungarian. Finer stemmed and leafier than most forage vetches. Suitable to various soils. Resistant to aphids.

WHEAT

Sow 90 to 120 pounds per acre

Marquis Spring Wheat. Standard, hard, red spring wheat for irrigated sections of the West. Early maturing and high yielding, beardless, short, stiff-strawed.

Turkey Red Winter Wheat. A standard red bearded wheat with a strong straw. Early ripening. Kernels large and hard.

Thompson Club or White Russian Wheat. Most widely used in the irrigated districts of Eastern Washington and Oregon. Beardless, soft white variety, outyields all other common varieties.

Inoculate all Legume Seeds with

NITRAGIN

"OVER FIFTY YEARS OF SERVICE"
When Ordering Always State Name of Seed

COMBINATION (AB)

Size	Retail
1 bu. each . . .	\$.55
2 bu. each . . .	.95

PEAS, VETCHES (C) (All Varieties)

100 lb. size (Inoculates up to 100 lbs.)
each \$.50

ALFALFA (A)

Size	Retail
2 bu. each . . .	\$.40
5 bu. each . . .	.60
25 bu. (1 can) 2.70	

SOYBEANS (S)

Size	Retail
2 bu. each . . .	\$.40
5 bu. each . . .	.60
25 bu. (1 can) 2.70	

CLOVERS (B)

Red, Alsike, Crimson, White and Ladino.
1 bu. each . . . \$.55

BEANS (D)

Navy, Pinto, Wax, String, Kidney and Great Northern
1 bu. each . . . \$.55

LESPEDEZA (L)

100 lb. size (Inoculates up to 100 lbs.)
each \$.55

PEANUTS, COW PEAS (E)

2 bu. each . . . \$.40

GARDEN SIZE — Peas, Beans, Sweet Peas, Lupines, Lima Beans and Edible Soybeans.

Enough for 8 lbs. seed—Retail Price 15c ea.

VEGETABLE SEEDS

Selected for best results in your growing area

It is our constant aim to stock the kinds of vegetable seeds that have proven most successful in this area. Planting the RIGHT varieties will make a big difference in your garden. We sell only fresh, high-vitality, true-to-type seeds, and that makes a big difference, too.

ASPARAGUS

1 oz. to 100 ft.

Sow in spring, 15 to 20 seeds to the foot. Cover 2 inches. Transplant to permanent beds the next spring.

Mary Washington. The most extensively grown variety. Large green spears with tight, purple-tinted tips, of fine quality. Heavily productive, very uniform. (Fz.)

BEANS

Bush, 1 lb. to 150 ft., 50 to 60 lbs. per acre
Lima, 1 lb. to 150 ft., 30 to 50 lbs. per acre
Pole, 1 lb. to 150 hills, 30 to 35 lbs. per acre

Do not plant until danger of frost is past. Press soil firmly around seeds. Thin young plants to about 6" apart. Keep cultivated until plants blossom. Do NOT cultivate when blossoms are at prime or when plants are wet with dew. Keep vines picked to insure a longer bearing period. Make plantings every two weeks for supplies throughout the season.

(Fz.) Variety specially adapted for freezing. *All-American Selection—See page 28.

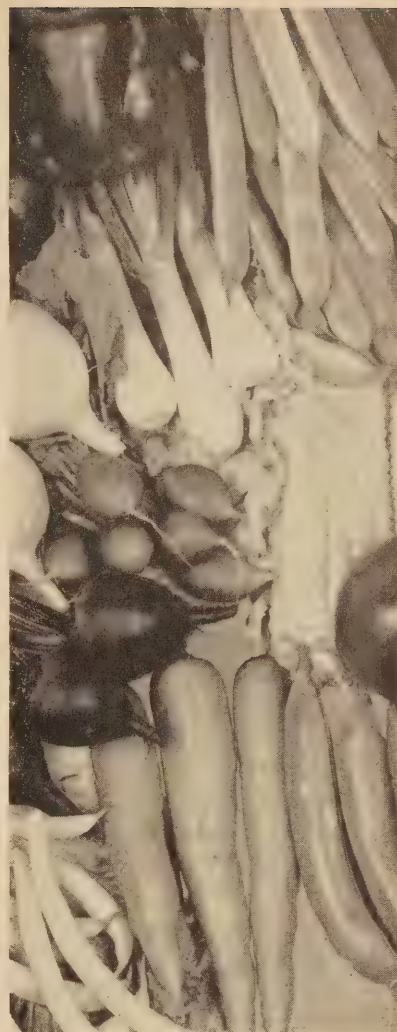
Bush, Green Pod

***TOP CROP.** (All America Winner 1950.) Plant is vigorous and very prolific, carries the pods low. Resistant to common bean mosaic. The 6-inch long pods are medium green, round, $\frac{3}{8}$ inch in diameter, very straight, stringless. Matures in 50 days.

Dwarf Horticultural. Particularly desirable green shell and snap bean for home and market garden. Plant medium high, thrifty and productive. Pods dark green at snap stage (53 days).

Improved Stringless Green Pod. High quality for home and market garden. Plant large, thrifty, heavily productive. Pods medium green, $5\frac{1}{2}$ inches long, almost $\frac{1}{2}$ inch wide and equally thick. Very fleshy, stringless, fine grained, tender. Seeds coffee brown. 53 days.

Tendergreen. Plants of strong and vigorous growth are well branched and carry a great quantity of beautiful light green beans. The pods grow 6 to 7 inches long. Round, extremely meaty, and absolutely stringless. 54 days. (Fz.)



COMPLETE

PRICE LIST OF VEGETABLES

Listed and Described on Pages 25 to 36

ASPARAGUS. Pkt. 10c; oz. 25c.

BEANS.

Bush, Green Pod. Pkt. 15c; $\frac{1}{2}$ lb. 25c; 1 lb. 45c.

Bush, Top Crop. Pkt. 15c; $\frac{1}{2}$ lb. 35c; 1 lb. 60c.

Bush, Wax Pod. Pkt. 15c; $\frac{1}{2}$ lb. 30c; 1 lb. 55c.

Pole, Kentucky Wonder Wax. Pkt. 15c; $\frac{1}{2}$ lb. 35c; 1 lb. 60c.

Pole, Oregon Giant. Pkt. 15c; $\frac{1}{2}$ lb. 35c; 1 lb. 60c.

All Other Beans. Pkt. 15c; $\frac{1}{2}$ lb. 25c; 1 lb. 45c.

LIMA. Pkt. 15c; $\frac{1}{2}$ lb. 35c; 1 lb. 60c.

BEETS. Pkt. 10c; 1 oz. 25c.

MANGEL (or Stock Beet). 1 oz. 25c; $\frac{1}{4}$ lb. 60c; $\frac{1}{2}$ lb. \$1.60.

BROCCOLI. Pkt. 10c.

BRUSSELS SPROUTS. Pkt. 10c.

CABBAGE. Pkt. 10c; $\frac{1}{2}$ oz. 20c; 1 oz. 35c.

CARROTS. Pkt. 10c; $\frac{1}{2}$ oz. 15c; 1 oz. 25c.

CAULIFLOWER.

Ideal. Pkt. 25c.

All Other Cauliflower. Pkt. 15c.

CELERY. Pkt. 15c.

CHICORY. Pkt. 10c.

CORN.

Hybrid. Pkt. 15c; $\frac{1}{2}$ lb. 30c; 1 lb. 55c.

lochief. Pkt. 15c; $\frac{1}{2}$ lb. 35c; 1 lb. 65c.

Open Pollinated, Yellow. Pkt. 15c; $\frac{1}{2}$ lb. 20c; 1 lb. 35c.

CUCUMBER. Pkt. 10c; 1 oz. 25c; $\frac{1}{4}$ lb. 75c.

EGGPLANT. Pkt. 10c; 1 oz. 65c.

ENDIVE. Pkt. 10c; 1 oz. 25c; 4 oz. 75c.

KALE. Pkt. 10c; 1 oz. 25c; $\frac{1}{4}$ lb. 75c.

KOHL RABI. Pkt. 10c; 1 oz. 50c.

LEEK. Pkt. 10c; 1 oz. \$1.00.

LETTUCE.

Head, Great Lakes. Pkt. 10c; 1 oz. 50c.

All Other Head Lettuce. Pkt. 10c; 1 oz. 40c; $\frac{1}{4}$ lb. \$1.20.

Leaf, Oak Leaf. Pkt. 15c; 1 oz. 50c.

All Other Leaf Lettuce. Pkt. 10c; 1 oz. 30c; $\frac{1}{4}$ lb. 90c.

MUSKMELON. Pkt. 10c; 1 oz. 25c; $\frac{1}{4}$ lb. 75c.

Granite State Canteloupe. Pkt. 25c.

All Other Melons. Pkt. 10c; 1 oz. 25c; $\frac{1}{4}$ lb. 75c.

MUSTARD. Pkt. 10c; 1 oz. 25c.

OKRA or GUMBO. Pkt. 10c; 1 oz. 25c.

ONIONS. Pkt. 10c; 1 oz. 75c.

PARSLEY. Pkt. 10c; 1 oz. 25c.

PARSNIP. Pkt. 10c; 1 oz. 25c.

PEAS. Pkt. 15c; $\frac{1}{2}$ lb. 20c; 1 lb. 35c.

PEPPER. Pkt. 10c; 1 oz. 75c.

PUMPKIN. Pkt. 10c; 1 oz. 25c.

RADISH. Pkt. 10c; 1 oz. 25c; $\frac{1}{4}$ lb. 75c.

RUTABAGA. Pkt. 10c; 1 oz. 25c; $\frac{1}{4}$ lb. 75c.

SALSIFY, Vegetable Oyster. Pkt. 10c; 1 oz. 50c.

SPINACH. Pkt. 10c; 1 oz. 25c.

SQUASH.

Caserta. Pkt. 15c.

Butternut. Pkt. 15c.

All Other Squash. Pkt. 10c; 1 oz. 25c; 4 oz. 75c; 1 lb. \$2.00.

SWISS CHARD. Pkt. 10c; 1 oz. 25c.

TOMATO.

Yellow Pear. Pkt. 10c; 1 oz. \$1.00.

Red Plum. Pkt. 10c; 1 oz. \$1.00.

Ground Cherry or Husk Tomato. Pkt. 10c; 1 oz. \$1.00.

All Other Tomatoes. Pkt. 10c; 1 oz. 70c; 4 oz. \$2.00.

TURNIP. Pkt. 10c; 1 oz. 25c; $\frac{1}{4}$ lb. 75c.

WATERMELONS.

New Hampshire Midget Watermelon. Pkt. 25c.

All Other Watermelons. Pkt. 10c; 1 oz. 25c; $\frac{1}{4}$ lb. 75c.

BEANS—Continued

Bush, Wax Pod

Average maturity 52 days from seed.

Black Wax, Pencil Pod. Very desirable for home and market garden and for truckers. Plants large and thrifty. Heavily productive over long period. Pods handsome bright yellow, $5\frac{1}{2}$ to 6 inches long, $\frac{3}{8}$ inch thick, cylindrical; very fleshy, stringless, brittle, fine grained, and tender. Quality unexcelled.

Kidney Wax, Round Pod. (Brittle Wax.) Valuable for home garden and canning. Plants are erect, medium large, prolific. Handsome pods of waxy light yellow, $5\frac{1}{2}$ to 6 inches long, thick and round. Very fleshy, brittle, strictly stringless and without fibre. Seeds white with brownish-black eye. (Fz.)

Golden Wax, Top Notch. Blight resistant. A splendid home garden and canning variety. Plant small, productive. Pods very attractive; golden yellow; $4\frac{1}{2}$ to 5 inches long, $\frac{1}{2}$ inch wide, thick, oval; fleshy, brittle, stringless. Seeds white, splashed with violet, carmine and purple.

Pole Beans

Mature in 75-80 days

Blue Lake or Improved White Creaseback. Splendid snap bean for home garden and early market. Good climber, heavily productive. Pods light green, $5\frac{1}{2}$ inches long, $\frac{1}{2}$ inch wide, almost as thick; nearly stringless, very fleshy, brittle, tender. Seeds white; excellent for baking.

Kentucky Wonder. The oldest favorite of all pole beans should be in every garden. The dark green pods are round and curved, measuring 9 to 10 inches; stringless when young. Seeds light brown.

Kentucky Wonder Wax. An early and hardy bean somewhat resembling the Kentucky Wonder except in color of pods which are light yellow and broader. If a wax podded bean is desired this is the one best variety to plant. Seed oval, flattened, somewhat shriveled, dark brown.

Oregon Giant. Highly recommended bean for Northwest home gardeners; keeps producing until frost. Large, fleshy pods, 10 to 12 inches in length, stringless, light greenish yellow, splashed with red. A very tasty bean requiring very little care.

Potomac. Six inches long, slender and round, this stringless meaty bean is a good climber and heavy producer. Excellent for home or market. (Fz.)

Lima Beans, Bush

Burpee's Improved Bush. Plants large, heavily productive. Pods large, $4\frac{1}{2}$ to 5 inches long. Usually contains 4 large, thick beans. Dry beans large, flat, greenish white. Thin to 18" apart. 75 days.

Cangreen. 68 days to maturity. Cangreen is notable for the green color of the fleshy part of the seed in the dry stage. Good for canning. Yields a prolific crop. (Fz.)

Fordhook. Large, spreading plant with slightly curved pods containing 3-4 light green beans of excellent quality, good for canning and freezing. Good in high temperature. (Fz.)

Lima Beans, Pole

Oregon Pole. Proven over many years to be well adapted to our cool Northwest climate. A strong, vigorous grower, bearing continuously until frost. Pods are at their best when yellow.

King of the Garden. Plants tall, good climber, hardy and vigorous. The pods are flat, $1\frac{1}{2}$ inches wide, about 6 inches long and contain 4 to 5 large oval greenish white beans. Seed large, flat and white. Matures in 88 days.

BEETS

1 oz. to 100 ft., 4-6 lbs. per acre

Prefer a rich sandy loam but will produce in any well fertilized soil. Space rows 14 to 24 inches apart.

Detroit Dark Red. The standard of excellence in table beets for home and market garden, for shipping, and for canning. Tops uniform, small, tender, erect. Roots globe shaped; symmetrical, with small collar and small tap-root. Very dark blood red. Mature in 52 to 55 days.

Early Wonder. Very desirable for home and market garden. Tops small. Root flattened globe shape and small collar and tap-root. Dark purplish red. Flesh deep purplish red zoned a lighter shade. Mature in 50 to 55 days.

Extra Early Flat Egyptian. Best for forcing and particularly valuable for early market. Tops small and upright. Roots flattened, with long slender tap-roots. Flesh dark purplish red, zoned lighter. Ready in 50 days.

Swiss Chard. See page 31.



TOP CROP

Bush, Green Pod. All-America.

Mangel (or Stock Beet)

1 oz. to 100 ft., 6 to 10 lbs. per acre

Valuable as stock feed

Danish Sludstrup. Very high yielding. Roots long oval, orange colored; flesh white with faint yellow tinge.

Giant Half Sugar. This variety is one of the favorites among the dairymen and hog raisers. It is very sweet and nutritious, as it has a higher sugar content than the ordinary mangel.

True Sugar Beet. The most desirable beet for sugar manufacture. Valuable for stock feeding. Roots medium large, 12 to 15 inches long, $3\frac{1}{2}$ to 4 inches at shoulder, tapered; white, with a tinge of gray; very rich in sugar. Good keeper.

BROCCOLI

$\frac{1}{2}$ oz. to 100 ft., 4 oz. per acre

This is similar to cauliflower and is especially suited to Pacific Coast states.

Italian Green Sprouting. This vigorous plant is entirely different from the white heading sorts. Cultivated like cabbage, it bears first a main head, then a succession of sprouts which, if kept cut, will be replaced by others for 8 to 10 weeks. Each sprout about 5 inches long, ends in a small head of dark green buds. It is one of the most delicious green vegetables. (Fz.) Pkt. 15c.

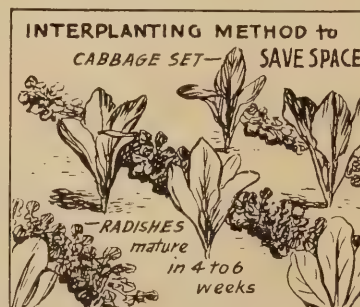
TWO CROPS FOR ONE SPACE

Organize your planting plan to keep the vegetable garden producing food for you throughout the season. Serial planting of fast-maturing vegetables, crop rotation, staking to save space, are main methods to use.

Unless you raise vegetables for quantity, storage or freezing, limit planting of any type to family's probable use in fresh form. Set perennial crops (Asparagus, Rhubarb, Artichoke, etc.) at one side of garden. They are permanent. Next to perennials set crops that occupy the ground through growing season (tomatoes, squash, pole beans, late potatoes, etc.). This leaves remaining space for serial planting and rotation of crops. Before the Tomatoes, Squashes, etc., are set out, their space may be given to radishes, lettuce and other quick-growing early spring crops (Peas, early Potatoes, etc.) are harvested, clear the area and replace with later crops (Bush Beans, late Potatoes, late Cabbage). Save space by staking Tomatoes, Cucumbers, etc. Set aside a small space for sowing Lettuce, Kale and other seeds that can be transplanted to the main garden later. Seedlings from this area can get started and be ready to set out when other crops have finished and their ground space is cleared. Make every inch of space count.

Shade-loving vegetables, such as Lettuce, can be planted on the shady side of tall-growing things. Sun-lovers should go upon

sunny side of tall plants. Heavy-fruited things, such as Squashes, can be allowed to sprawl on banks or run over fences—if support is placed under developing fruits. One or two plants of Zucchini or other types of Squash—or Pumpkin—are enough to meet average family needs. Tomatoes, Eggplant, etc., can, if desired, be grown staked in pots or tubs and shifted as desired during the season. Pole Beans are a space saver and fit well into the "vertical garden" plan.



Another space-saving method is interplanting in spring of early, fast maturing crops with slow, late maturing vegetables, as shown above.

BRUSSELS SPROUTS

½ oz. to 100 ft., 4 oz. per acre

Can be successfully grown wherever conditions are favorable for late cabbage and require the same method of culture. They mature best in autumn after the weather becomes cool.

Dwarf Improved. Plants dwarf and compact, 20 inches tall. Very uniform; stem well covered with firm, round cabbage-like balls 1¼ to 1½ inches in diameter, mature in succession. Pick as needed.



COPENHAGEN MARKET CABBAGE

CABBAGE

Sow early varieties under glass and transplant to open ground as early as possible. Sow late varieties in open in April and May. Keep the crop well watered and cultivated. Best in good, heavy soil with good drainage; light soils should be well fertilized. Shallow but frequent cultivation.

EARLY VARIETIES

Mature between 60-65 days

Copenhagen Market. Distinctly and uniformly early. Splendid for early market and shipment; valuable as an early kraut variety. Plants small, compact, allowing very close planting. Stem short; heads uniformly round; firm; 6 to 7 inches in diameter. Weight, 3½ to 4 lbs. Interior clear white and of excellent quality. Mature in 66 days.

Early Jersey Wakefield. Extremely early, valuable for home market and shipping. Plants very small and compact, allowing close planting; stem short. Heads firm and conical; usually 7 inches long, 5 inches thick near base; weight 2 to 2½ lbs.

Golden Acre. The earliest round-headed cabbage; especially valuable for early market and shipping. Plants very small and compact; stem short. Heads uniformly round; firm, commonly 6 inches in diameter and weigh 3 pounds.

LATE VARIETIES

Mature in 90 to 100 days

Danish Ball Head. One of the best late varieties. The plants are medium sized with short stems. Heads large; flattened globe shape; becomes 8 to 9 inches across, 6 to 7 inches deep, and weigh 7 to 9 pounds. Very firm and solid; of excellent quality; keeps perfectly in storage.

Late Flat Dutch. The best very large, late cabbage. A good keeper. Heads very large and flat, but deep; become 12 to 14 inches across, 7 inches deep, and weigh 12 to 14 lbs. or more; firm, good quality.

Grow Your Own VITAMINS:

Garden fresh vegetables are the surest source of health-giving, health-preserving vitamins. Grow 'em yourself.

Beans: Vitamins A, B, C, G.
Beets: Vitamins C, G.; greens: Vitamins A, G.
Carrots: Vitamins A, B, C, G.
Corn: Vitamins A, B, C, G.
Cucumbers: Vitamins A, B, C.
Lettuce: Vitamins A, B, C, G, E.
Muskmelon: Vitamin C.
Onions: Vitamins B, C, G.
Parsley: Vitamin C.
Squash: Vitamins A, B.
Tomatoes: Vitamins A, B, C.
Turnips: Vitamin C; greens: Vitamins A, B, C, G.



Mammoth Red Rock. A sure cropper and used very extensively for pickling. The solid heads are borne on medium-length stems and are red throughout. Perfectly round, solid and quite large. Often weighing 6 to 8 pounds each. The latest of the red cabbages.

Savoy. Enjoys great popularity on account of its tasty, delicate flavor. The large round heads are somewhat flattened and very heavy. The deep green, crinkled outer leaves enclose the tender, light green heart. It matures in the fall and will keep all winter.

CHINESE CABBAGE

Chihli. Rapidly growing in popularity. It somewhat resembles the Cos lettuce in shape, forming long heads of crisp leaves. Very mild and pleasantly flavored. Serve as a salad or cooked.

CARROTS

½ oz. to 100 ft., 3 to 4 lbs. per acre

Sow from April to July. Prefer a light, sandy soil.

Chantenay, Oregon (Long Type). Deep golden orange flesh, always smooth and fine in texture, very tender. Excellent bunching variety. Medium early. 72 days.

Chantenay, Red Core. Flesh tender and sweet, reddish orange with the core about the same color. Fine for canning and table use. 72 days.

Danvers Half Long. Red core. The roots are a rich dark orange, an excellent bunching variety. Most popular with growers and shippers. About 75 days.

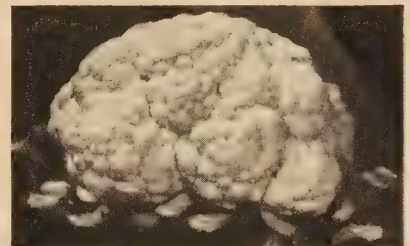
***Improved Imperator.** Grows to a length of 7-8 inches with a shoulder diameter of 1¼ to 1½ inches, making a smooth crown. No undesirable side shoots; fine texture, good, sweet flesh. Deep orange. 77 days.

Nantes. Excellent for forcing. Tops are very small. Roots bright orange, cylindrical, blunt tipped. Flesh reddish orange, crisp, tender and of very delicate flavor. Practically coreless. Probably the best home garden variety. 68 days.

Stock Carrots

Orange Belgian. A very productive variety, with roots measuring 20 inches long. They are broad at the shoulder, and gradually taper to a fine point. The skin below the ground is a light orange, but above the soil surface it is green. Will yield heaviest in good deep soil.

White Belgian. A late variety, an excellent keeper and very productive. Principally grown as stock feed, since it will yield as much as 40 tons per acre. Roots are 7 to 8 inches long, 3 inches across at the top, tapered and pointed.



CAULIFLOWER

CAULIFLOWER

½ oz. to 100 ft., 4 oz. per acre

Treat the same as cabbage but gather the tops of the leaves together loosely as soon as the heads begin to form.

Early Snowball. (52 days.) The best for greenhouse forcing, early market, and shipping. Plants very dwarf. Heads snow white, deep, smooth and compact; about 6 inches across, weighing about 1½ to 2 pounds. The standard of excellence in cauliflower. (Fz.)

St. Valentine. Standard market variety for March shipment. Plants large. Heads large, solid, white, and very well protected.

CELERY

½ oz. to 100 ft., 4 oz. per acre

Sow from February to May, transplanting in June to rows 3 feet apart. One ounce of seed will produce 5000 plants.

Golden Utah. A light yellow-green selection of the original "Utah." Has superb quality and size of original, plus easier bleaching quality.

Utah Jumbo. A remarkable late celery of the finest quality. Plant sturdy, compact and solid. Very free from strings. Light green in color; nutty flavor.

CHICORY

1 oz. to 100 ft., 4 to 5 lbs. per acre

Sow chicory when weather becomes warm and settled. Sow in rows at least 24 inches apart and thin to 13 inches between plants.

Witloof or French Endive. Seed sown in spring produces long, thick roots by November. To force for use, dig roots in fall and trim the leaves off an inch above the crown. Trench in a warm, dark place, covered with 6 or 8 inches of soil. A handsome, compact head of blanched leaves resembling Endive is the result, tender and of rich, mildly acrid flavor.

Large-rooted Magdeburg. Roots 12 to 14 inches long, 2 inches in diameter at top; tapered. The dried roots are often roasted and mixed with ground coffee.

SWEET CORN

LOCALLY ADAPTED HYBRIDS: In recent years the hybrid types of sweet corn have been specially developed for special conditions. Ask for our recommendations.

Sweet corn, 8 oz. to 100 ft., 10 to 14 lbs. per acre

Plant in rich, warm soil, in hills, 2 to 3 feet apart, in rows 3 feet apart for early kinds and 4 feet apart for the late sorts. Make first sowing about the middle of May and continue fortnightly up to about the middle of July. Corn should be planted in blocks of at least 4 rows.

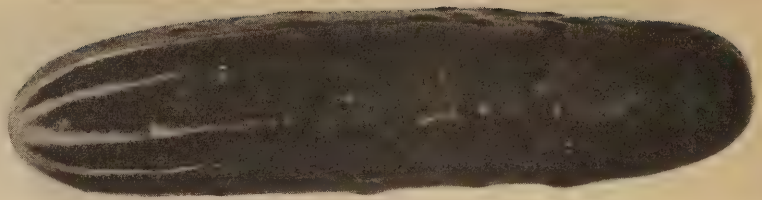
Hybrid

Listed in order of ripening

Spangcross. (73 days.) Very early. Well filled 6-inch ears of a medium yellow. Good quality. Plants grow 4 to 5 ft. tall.

Marcross. (76 days.) Stalks short but sturdy, highly resistant to bacterial wilt. Ears long, plump, abruptly tapered at tips; 10-14 rowed, with light cream-yellow kernels. Good flavor and quality. Early. Plants 4½ to 5 ft. high.

***lochief** (1951 All America Winner). Ears 8½ to 9 inches long, with 16 to 20 rows of glossy yellow kernels. High yield, good color and quality, and attractive appearance combine to make an ideal canning and freezing corn. (Fz.)



CUCUMBER, CUBIT

Open Pollinated, Yellow

Golden Bantam. 8-row. (79 days.) Slender ears 5½ to 6½ inches long have 8 rows of even golden kernels of good flavor. Very sweet. Popular with the home gardener. (Fz.)

Golden Bantam Improved. (81 days.) Larger ears, more rows of kernels, greater production. Golden yellow, deep, wide, tender kernels with a fine sweet flavor.

Golden Early Market. (77 days.) Early yellow variety for home and market garden. Ears have strong husks and 8 to 12 tender rows to each ear. Kernels golden yellow, medium sweet and of good flavor.

PRICE LIST OF VEGETABLE SEEDS ON PAGE 25

CUCUMBERS

1 oz. to 100 ft., 3 to 4 lbs. per acre
Mature in approximately 60 days

Sow outdoor varieties early in spring, in hot-beds or cold frame, and transplant to open ground when weather is suitable. For later crop, sow seed when weather becomes settled, in hills 4 to 5 ft. apart. They require a warm, rich soil, and should be watered liberally.

Colorado. (60 days.) About 8½ inches long. This cucumber is popular. It does not taper. The color is dark green. The flesh is crisp and tender. Heavy yielder.

***Cubit.** Handsome, long, cylindrical fruits of dark green exterior, with crisp, white flesh and small seed area. Excellent for home and shipping.

Improved Long Green. (67 days.) The fruits are handsome, being of good form and of a deep green color which is retained a considerable time after picking. 9 to 10 inches.

Lemon. (65 days.) Little cucumbers resembling lemons in both form and color with a delicious and distinctive flavor. Fine for preserves or sweet pickles and superb as a salad. Prolific.

Marketer. (65 days.) 8 inches long, 2¼ inches in diameter, straight and symmetrical, slightly tapered at the ends; very uniform, dark color. A vigorous grower and exceptionally prolific. The flesh is sweet and crisp. Most popular.

National Pickling. (56 days.) A highly desirable pickling strain. Fruits are well warted; are dark green, symmetrical with thick walls; full ended. Slightly shorter than Chicago Pickling.

Straight 8. (66 days.) Symmetrical, cylindrical fruits about 8 inches long and 2½ inches in diameter. Fruits are well rounded at the ends and when ripe are deep green and free from striping or tipping. Ideal for home or market.



Varieties marked * have received an award by



This is a sign of outstanding merit since AAS awards are given only after rigid testing by expert growers in all parts of the U. S. A.

PREPARING VEGETABLES for FREEZING

1. Use only the finest vegetables.
2. Prepare and freeze vegetables as quickly as possible.
3. Scald vegetables by placing in colander, strainer or similar container and immerse in rapidly boiling water. Use only small quantities so water will come to boil within half a minute after vegetables are added. Count only the time that the water is boiling. Drain quickly.
4. Cool by immersing immediately in cold water, preferably ice water. When vegetables are thoroughly cooled remove and drain.
5. Pack in suitable airtight containers such as waxed cardboard cartons, tempered glass jars or lacquered tin cans. Allow 1 to 1½ inches space for expansion in freezing.
6. Place in quick freeze immediately after packing.

Asparagus. Wash and cut into desired lengths, blanch 2 to 3 minutes.

Green Lima Beans. Shell and scald 1 to 1½ minutes.

Green Beans. Wash, stem and string. Scald whole beans 5 to 6 minutes, cut beans 2 to 3 minutes, French cut beans, 1 to 2 minutes.

Brussels Sprouts. Soak in salt brine or cold water 15 minutes. Scald 3 to 4 minutes.

Cauliflower. Break into flowerets, soak 5 minutes in brine, scald 2½ to 3½ minutes in brine.

Carrots. Wash and dice or slice. Small carrots may be left whole. Scald diced or sliced carrots 2 to 3 minutes, whole ones 3 to 5 minutes.

Corn on the Cob. Husk, trim and wash. Scald, a few ears at a time, for 1 to 2 minutes. Chill thoroughly in ice water, drain and wrap each ear in parchment paper or moisture proof locker paper. THAW before cooking.

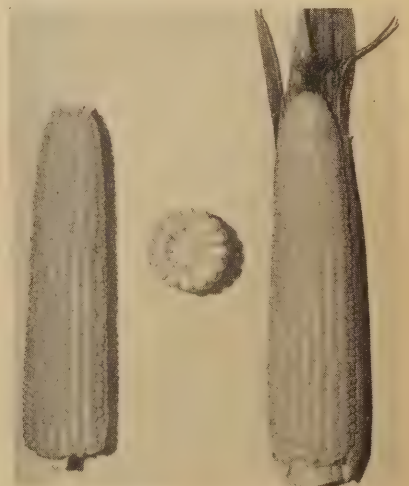
Whole Kernel Corn. Husk, trim and wash. Scald on the cob 2 to 3 minutes. Cut from cob, pack dry and seal tightly.

Peas. Shell and immediately scald for 1 to 1½ minutes.

Spinach. Blanch 1 to 2 minutes, a small quantity at a time. Avoid cooking. Stir gently while in the boiling water to prevent sticking together.

Zucchini. Use young tender squash. Wash, remove blossom ends, slice in sections 1 inch thick, scald 1½ to 2 minutes.

Note: In each case in the above directions it is understood that scalding is to be followed by draining, chilling, packing and quick-freezing.



NEW CORN, IOCHIEF



BONNY BEST
TOMATOES

LAXTON'S
PROGRESS
PEAS

No matter how much work and care you put into your vegetable garden you can not expect good results unless you use reliable seed. We pride ourselves on the quality of our seeds and sell them with confidence that you will find them highly satisfactory.



CARROT
IMPERATOR



NEW YORK TYPE LETTUCE



EARLY
WONDER
BEET



SPARKLER RADISHES



MUSKMELON

See
Complete Listing
of
Vegetable Seeds
on
Pages 25 to 36



ONION, SWEET SPANISH



CORN, GOLDEN CROSS BANTAM



CABBAGE, COPENHAGEN MARKET

Ever Try a Cover Crop?

Some portions of your vegetable garden will probably be unused during part of the year. It's a good idea to sow a quick growing cover crop such as a combination of winter oats and vetch, or winter oats and rye, in these idle spaces. When planting time arrives turn your cover crop under to obtain the benefit of the humus and plant food stored in the green plants. If you have never tried cover cropping you'll be surprised at the results. Even stiff clay soils are noticeably improved by the use of a cover crop.



EGGPLANT, BLACK BEAUTY

EGGPLANT

1/4 oz. to 100 ft., 5 to 6 oz. per acre

Sow in mild heat, about the middle of March, and transplant on June 1, setting the plants 2 1/2 feet apart.

Black Beauty. (80 days.) The fruits of this variety are large and symmetrical. Retains its glossy black-purple coloring for a long time. This lasting quality makes it distinctly popular.

ENDIVE

1 oz. to 100 ft., 4 to 5 lbs. per acre

Sow about the middle of April, in rows 1 1/2 feet apart, and thin out to about 9 inches apart.

Broad-leaved Endive. Leaves long, broad, and succulent. Fine for winter salads and cooking.

Green Curled Endive. Outer leaves bright green, midribs tinged with rose. Center leaves blanch readily. Makes attractive salads. Vigorous and resistant.

KALE

1 oz. to 100 ft., 4 to 5 lbs. per acre

Culture same as late cabbage

Dwarf Green Curled Scotch. (55 days.) Plants have wide-spreading, finely curled blue green plume-like leaves. Relished as a vegetable green and useful as an ornament.

Tall Green Curled Scotch. (60 days.) Hardy plants with leaves deeply cut. Curled at the edges, light green in color; very tender and finely flavored after touched with frost.

Jersey or Thousand Headed. Called Chicken or Cow Kale. Vigorous branching plants with enormous cabbage-like leaves. Relished by poultry and livestock as winter greens.



KOHL RABI, EARLY VIENNA

KOHL RABI

1/2 oz. to 100 ft., 4 to 5 lbs. per acre

The delicious flavor of this turnip-shaped bulb combines both cabbage and turnip. Early in spring sow the seed in light rich soil in rows 1 1/2 feet apart. When plants are well established, thin to 6 inches apart in the row.

Early White Vienna. (55 days.) For forcing. The best table sort if used when the bulbs are 2 inches in diameter. It matures early and produces medium sized light green bulbs with white flesh of excellent quality.

LEEK

Large American Flag. An early popular sort. Stems 8-10 inches long, 1 1/2 inches thick; white, and attractive. Leaves large, medium green, drooping backward.

LETTUCE

1/2 oz. to 100 ft., 3 lbs. per acre

Sow indoors in February and March, planting outdoors when weather is suitable.

***Great Lakes.** (83 days.) A heading variety of the Imperial type. Leaves large and well folded; ribs heavy. Shows considerable resistance to tipburn and ability to head under adverse conditions.

Early Great Lakes. Early variety of above.

New York No. 515 Improved. A development from Number 12, matures slightly earlier. Resistance to tip-burn makes this lettuce ideal in hot weather.

LEAF LETTUCE

Black Seeded Simpson. (45 days.) A good non-heading or cutting lettuce with broad, light green, frilled outer leaves. Center leaves are almost white. Crisp leaves with a delicate flavor.

Grand Rapids. Very early. Hardy, disease resistant. Most used for greenhouse forcing. Plants large, upright, compact, and handsome; bright, solid, light green, large leaves with broad, much frilled margin. Very tender and sweet when grown under glass.

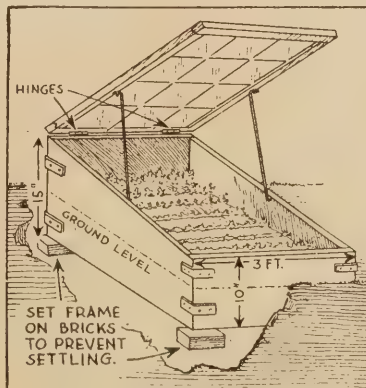
Oak Leaf. Shaped like an oak leaf. Stands up well in hot weather and does not turn bitter.

Red Leaf Prize. An early non-heading sort, very desirable for home garden use. Plants of medium size, crisp and tender; color medium green with brownish-red edges on outer leaves.

PRICE LIST OF VEGETABLE SEEDS ON PAGE 25

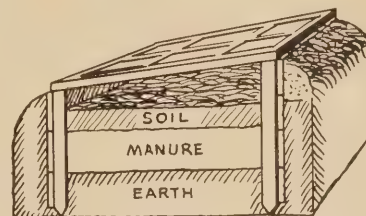
HOW TO MAKE HOTBEDS OR COLD FRAMES

A cold frame is a box without top or bottom, placed on the ground and covered with a glass or plastic lid to let in light and keep temperature steady. A hot bed's just a cold frame with heat in the ground under it to speed up plant growth. Heat may be by electric soil cable or decomposing organic material buried under soil surface. Make front lower than back and slope sides so that lid will hinge to back and slant down to front, and can be raised up for ventilation control. A window sash or cello-glass tacked on frame will serve as cover. Place it where direct sun doesn't hit it but air circulation is good.



Working Drawing of a Cold Frame

If electrical connection is feasible, soil cable buried under soil surface in which plants are to be forced will be effective. Cables are available in various length. A 50-foot cable heats 36 square feet.



Hotbed with Cross Section of Its Layers

For non-electric hotbed, 12 to 24 inches of manure surfaced with 5 to 6 inch layer of soil will work.

If on surface of ground, make box deep enough to allow for heating material plus soil, and bank additional manure around outside to maintain heat. If a pit is used, choose a well-drained situation. Fresh stable manure is best heat producing material, but wetted cuttings of corn or grass will also do the work.

MUSKMELON

1 oz. to 100 ft.
3 to 4 lbs. per acre

Where summers are short sow in pots in-doors, planting out in rich, well manured soil when danger of frost is over.

Granite State Cantaloupe. Very early orange-fleshed, netted yellow melon of high quality. The fruits are about 5 to 5½ inches by 4 to 4 inches, produced abundantly on the small-leaved compact vines.

Hale's Best Improved No. 36. (80 days.) Fruits slightly oval, weight 3 to 4 pounds. Flesh exceptionally thick, deep salmon in color, sweet, aromatic and of very fine quality. Uniform in shape.

Hale's Best, Jumbo Strain. An outstanding shipping variety. Fruits slightly oval, uniform. Flesh thick, deep salmon in color; sweet, and of very fine quality. Has a delightful aroma. Ripe in 75-80 days.

Hearts of Gold. (100 days.) This popular medium sized melon follows the earlier varieties. Fine for succession planting. The fruits are 5 to 6 inches in diameter. The smooth orange salmon flesh is exceptionally thick and fine flavored.

Imperial No. 45. (87 days.) Extensively used because of resistance to downy mildew. Similar to Hale's Best but faintly ribbed. An exceptionally good shipper.

Imperial No. 4-50. Same as above, but larger in size.

Rocky Ford or Netted Gem. (92 days.) Fruits are small with rather large seed cavity, nearly round; no ribs, and heavily covered with hard gray netting. Flesh thick, green in color with gold tinge at the center. Juicy, spicy, and of good quality.

OTHER MELONS

Casaba. (110 days.) The casaba is a melon for the late season after the muskmelons are past. Fruits are medium, large, globe shaped, weigh 6 pounds; outer color golden yellow, surface wrinkled. Flesh white, luscious and spicy.

Cranshaw. (96 days.) A thick-fleshed melon with salmon color inside, golden green outside. Round at base, stem end pointed. Weighs 7 to 8 pounds.

Honey Dew. (112 days.) A very fine melon. Fruits large globular, weight 5 to 6 pounds. Surface is smooth, hard, with practically no netting, creamy white. Flesh light emerald green, thick, ripening to the rind; juicy and tender, with a distinct sweetness not found in others.

Persian. (115 days.) A late, slow growing variety. Fruits globular; rind very dark green, netting fine but sparse. Flesh thick, orange-pink in color. Of a distinct and delicious flavor.



MUSKMELON, CRANSHAW

PARSNIP

1 oz. to 100 ft., 3 to 4 lbs. per acre

Sow in deeply worked, manured soil.

Hollow Crown. A smooth, large-root parsnip free from side roots, with a very well proportioned shoulder uniformly tapered to the tip. Very tender and good flavor.

MUSTARD

½ oz. to 100 ft., 4 lbs. per acre

Make successive sowings in open from early spring to midsummer.

Southern Giant Curled. The leaves are large, light green with a tinge of yellow, and much crumpled and frilled at the edges. The plant is upright or slightly spreading in growth. Valued for its vigor, hardness, and good quality.

Mustard Spinach or Tendergreen. Strictly speaking it is not a variety of mustard. A quick growing plant from the Orient. Leaves oblong, broad, fairly smooth with light green center ribs. Slow to seed, resistant to heat and drought. The flavor combines that of spinach and mustard.

OKRA or GUMBO

2 oz. to 100 ft., 8 to 10 lbs. per acre

Sow seed early in May, in rows 3 feet apart and 2 inches deep. As plants appear, thin out to about 1 foot apart.

Improved Dwarf Green. Early. Short thick pods.

Perkins Mammoth Long Pod. Standard medium early sort for home, market garden and canning. Plants 4 to 5 feet tall; pods dark green, fleshy, tender; become 7 to 8 inches long, 1½ inches in diameter. Distinctly ribbed and tapered.

ONIONS

½ oz. to 100 ft., 3 to 4 lbs. per acre

As early as soil can be worked in spring, sow the seeds thinly in drills 1 foot apart, and cover lightly, later thinning out to about 6 inches apart in the row. The soil must be well fertilized and be made very friable. In hot weather, water frequently.

Southport White Globe. White winter onion. A heavy yielder and large size. Good keeper. Silvery white in color, globe shaped. Mild flavor.

Yellow Sweet Spanish (Utah Strain). A large, globe shaped onion, weighing 1 to 3 pounds. Small tops. Flesh mild and sweet. Good for slicing. Most popular marketing onion. (Fz.)

White Bunching. Crisp, sweet and mild, the best variety for green onions.

White Portugal, or Silverskin. A good second early white flat onion. It should be planted any time from November 1st until April 1st. It is a good keeper and desired for shipping. Fine for pickling.

White Sweet Spanish. (112 days.) A very large onion with pure white flesh, similar to the Yellow Sweet Spanish. A good keeper. Globular with small neck.

Yellow Globe Danvers. Dependable, medium late, hardy and excellent keeper; used for shipping and storage. Bulbs medium size, clear yellow, firm and solid with tough, clinging skins. Flesh white.



ONION, UTAH, SWEET SPANISH

ONION SETS

Sets are northern grown, hardy, carefully cleaned, graded and packed. Produced for western conditions. Plant onion sets deep for green onions and shallow for dry onions. 1 lb. to 50 ft.

GARLIC SETS

(In about 110 days.) Garlic is grown by planting the small bulbs in rows, 4 inches apart in the row. Cover the bulbs with one inch of soil. When the tops turn yellow, lift the bulbs and dry in the shade. To keep for the winter, hang in strings in a dry basement.

PARSLEY

½ oz. to 100 ft., 3 to 4 lbs. per acre

Grows best in rich mellow soil and should be sown as early as possible in spring.

Extra Triple Curled (Moss Curled). This vigorous compact grower is one of the most popular varieties because of its deep green color and tightly curled leaves that look like moss. It is unusually decorative.

Don't Forget the Compost Pile

Compost your lawn clippings, vegetable tops and peelings, dry



leaves and other vegetable matter for a rich source of humus and plant food.

Make a pit or bin and throw the compost material into it, add a sprinkling of packaged compost maker and 2 inches of soil to each foot of vegetable matter. Repeat until pile is 3 or 4 feet deep. Keep moist to promote bacterial action.

In about 6 months the compost will be ready to use. Spread it on the garden as you would barnyard manure. Used with peat moss and commercial fertilizer, compost is a really important aid to good gardening.

PEAS

Early peas need a light, warm soil; but general crop thrives best in moderately heavy soil. (Avoid fresh manure and very rich or wet, mucky soil.) Plant with the first spring flowers, as Peas are not satisfactory when weather turns hot. Tall varieties must be staked. Most home gardeners prefer dwarf varieties. Inoculation improves production.

FIRST EARLY VARIETIES

1½ lbs. to 100 ft., 90 to 180 lbs. per acre

Alaska. (55 days.) This variety is extremely early. The round pods, 2½ inches long, contain 5 to 8 peas which are ready for use in about 55 days. The peas are small, round, and tender. The vines are 2½ to 3 feet tall.

Gradus. (55 to 62 days.) A very popular second early, large podded variety for home use and market. Vines 36 inches tall, medium green, stocky. Pods single, broad, plump, pointed, medium green; contain 8 to 10 large, delicious peas. (Fz.)

Laxton's Progress. (60 days.) A little earlier than other dwarf large podded peas, this variety is generally considered the best of its class. The blue green pods are often more than 4 inches long and contain 8 dark green peas of finest quality. The seeds are large, wrinkled green and cream. (Fz.)

Little Marvel. (64 days.) Outstanding among dwarf peas for the exceptional quality and yield. Valuable for home garden and early market. Vines dark green, 18 inches tall, stocky. Pods single and double, dark green, blunt, plump, well filled with 7 to 8 tender peas.

Thomas Laxton. (62 days.) Excellent all-purpose variety. Plant deep green and medium heavy. The single, deep green plump pods contain 7-8 large, tender peas of high quality. Seeds of medium size, cream and green.



PEAS, GRADUS

MAIN CROP

Mature to pick in about 75 days

Tall Telephone or Alderman. A handsome, large podded variety. Unexcelled for home gardens, for local market and for shipping. Bears immense crops. Wilt resistant. Pods single, very broad, plump, straight, dark green, pointed, contain 8 to 10 peas of highest quality. (Fz.)

Dwarf Telephone. Only about 2 feet tall, otherwise like Alderman. The pods are well filled with peas of the same good quality. An excellent variety to follow the early peas. Seeds large, green, wrinkled.

FERTILIZING THE VEGETABLE GARDEN

If you are growing all the vegetables that space permits in your food garden, you must provide FERTILIZATION and IRRIGATION to fit the extra demands of your intensive planting. Either a cover crop or winter dressing of manure to be spaded in when the ground is prepared, or good commercial fertilizer broadcast over the ground (6 lbs. to 300 sq. ft.) before spading, gives foundation for your plants' food. This can be supplemented throughout the season with liquid fertilizer or side dressing. In sowing peas, etc., make trench deeper than you sow them, put in fertilizer (1 to 1½ lbs. per 100 feet); cover with soil before sowing. Either liquid or commercial fertilizer may be applied, during growing season, along the rows, 1½ to 2 inches away from plants, at 10 day to two weeks intervals



Concern over acidity of garden soil has been to the fore in recent years. Practically all garden vegetables will thrive in soil only slightly on the acid side. Unless your soil is markedly acid or alkaline it needs no special correction, and ordinary good fertilizing practice will take care of it. Starter solutions for transplanted items, such as tomatoes, are good. Mixed fertilizers (1 lb. to 10 gals. of water) or commercial booster solutions work nicely and may be continued at intervals, as liquid fertilizers through the season. For single plants, a ring of fertilizer around each will take care of requirements. Organic material should be worked into the vegetable garden each season to keep the soil texture and friability, and balance the effect of chemical fertilizer used.



PEPPER

¼ oz. to 100 ft., 1 to 2 lbs. per acre

Culture, soil and temperature requirements are about the same as for eggplant. A moderate dressing of guano, poultry manure, or complete commercial fertilizer, hoed into the soil after the plants are 6 to 8 inches tall, will be very beneficial.

California Wonder. Thickness of flesh alone, which is often ¾ of an inch, places this sweet pepper above all others. It is crisp and juicy, too, without a trace of pungency. Vigorous growing plants bear a heavy yield of blocky fruits as much as 5 inches long and 4 inches wide.

Long Red Cayenne. This well known, medium early pepper is especially good for drying purposes. The fruit is 4 inches long and 1 inch thick, twisted and pointed. It is deep green when young and bright red when ripe. The flesh is strong and pungent.

Perfection Pimento. A splendid canning variety, adapted to home and market garden culture. Plants large, erect, prolific. Fruits heart shaped, very smooth; flesh exceptionally thick, sweet and mild.



PEPPER, CALIFORNIA WONDER

PRICE LIST OF VEGETABLE SEEDS ON PAGE 25

PUMPKIN

4 oz. to 100 ft., 3 to 4 lbs. per acre

Pumpkins are typically American, and pumpkin pie is one of our truly American dishes.

Pumpkins are less sensitive to unfavorable conditions of soil and weather than melons or cucumbers, but they are cultivated in about the same way.

Kentucky Field or Dickenson. Fruits very large, flattened, furrowed. Skin creamy buff; flesh extremely thick, deep salmon-yellow and of good quality. Dependably early and heavily productive. Good for canning. Squash bug resistant.

Large Yellow or Connecticut Field. This sort is grown largely in the corn field for stock, but the flesh is moderately fine grained, highly flavored, and very good for pies. The fruits weigh about 20 pounds and are a deep orange yellow.

Sugar or New England Pie. The earliest and best variety for pies. Fruits commonly 6 inches long and 8 to 9 inches in diameter; flattened, furrowed. Skin smooth, of a rich, reddish-orange color; rind hard. Flesh thick and orange-yellow.

Winter Luxury. The fruit of this variety matures in 75 to 80 days, weighs 8½ pounds, and is nearly round. The skin is light yellow with a russet tinge and finely netted; the flesh is rich creamy yellow, thick, sweet, and finely flavored.

WHEN TO SOW

Plants are geared to light and warmth and, when these are right, their growing mechanisms will respond. These factors may vary in varying locations and different years. So Nature's signs in your own neighborhood are what you need to watch rather than calendar dates.

Dates of average last killing frost in your region can be obtained from the Weather Bureau. These give rough idea of the time frost danger is past. But while you use the Weather Bureau date as a base, correct it with observation of weather behaviour in your own immediate environment. Plants that are started from seed in hotbed or coldframe, or pots upon the windowsill, should be sown in time to be ready to transplant outdoors as soon as frost danger is past. Plants that are hardy can be sown outdoors in the spring as soon as the ground can be worked—or when the farmer is sowing his spring oats. Lettuce, Cabbage, Broccoli, Carrots, Cauliflower, Onions, Spinach, Turnip, Radish, Parsnips, Potatoes, Peas, and such go in at this time. Crocus and Snowdrop are then usually in bloom.

When early Tulips, Daffodils and Maple Trees are blooming, plant Beets, Onion Sets, Swiss Chard and the like.

During the time of the apple blossoms, Lilacs and late Tulip blooms, Pumpkins, Bush Beans, Sweet Corn and Squashes may be planted.

When frost season is well past and the apple blooms have fallen and tall Bearded Iris are blooming, you can feel safe planting Lima and Pole Beans, Melons, Peppers, Eggplant, Tomato plants, Cucumbers, Chard, and other frost-tender material.

In autumn, Beets, Collard, Kale, Lettuce, Mustard, Spinach, Turnips and other such hardy plants can be set out, 6 to 8 weeks before the first killing frosts—when Dahlias, early Chrysanthemums and others of the fall flowers usually get well into bloom. Fall plantings are somewhat of a gamble to gardeners who aren't experienced in their local climate, but a gamble that usually pays off fairly well except in extreme northerly climates.

Good practice for continuing gardening over several seasons is to keep a diary and check each season on planting dates, frost dates and results of each season's activity. Within a few seasons a pattern of your garden will be apparent, by which you will be able to time your planting of material with steadily increasing accuracy to obtain best possible results.

If you are growing potted vegetables, such as a few tomatoes, peppers, eggplant or the like, these may be started indoors and carried along under protection until temperature and weather outdoors becomes favorable and them moved out. This method may hasten their fruiting time somewhat.

RUTABAGA

1 oz. to 100 ft., 2 to 4 lbs. per acre

The culture is the same as for turnip, but if anything, less exacting in care.

Purple Top. Medium top and very small neck. Roots are large, flattened globe in shape, yellow with purple top. Flesh is yellow, firm and of excellent quality.

SALSIFY, Vegetable Oyster

1½ oz. to 100 ft., 7 to 8 lbs. per acre

Sow in deeply worked, well manured soil avoiding coarse and fresh manure.

Mammoth Sandwich Island. Large and strong growing plant with long, smooth, white, tapering roots.

Do You Plant by the Moon?

For those of our customers who follow the ancient practice of planting by the moon, we have prepared this handy reference chart. It shows the day and the hour at which the moon enters each of its phases. For instance, on January 21st at 9:43 P.M., the moon enters the first quarter. It remains in this phase until January 29th at 3:44 P.M., when it becomes full.

Last
Quar.



New
Moon



First
Quar.



Full
Moon



1953

Jan.	8	2:09 A.M.	15	6:08 A.M.	21	9:43 P.M.	29	3:44 P.M.
Feb.	6	8:09 P.M.	13	5:10 P.M.	20	9:44 A.M.	28	10:59 A.M.
Mar.	8	10:26 A.M.	15	3:05 A.M.	22	12:10 A.M.	30	4:55 A.M.
April	6	8:58 P.M.	13	12:09 P.M.	20	4:40 P.M.	28	8:20 P.M.
May	6	4:21 A.M.	13	9:06 P.M.	20	10:20 A.M.	28	9:03 A.M.
June	4	9:35 A.M.	11	6:55 A.M.	19	4:01 A.M.	26	7:29 P.M.
July	3	2:03 P.M.	10	6:28 P.M.	18	8:47 P.M.	26	2:20 A.M.
Aug.	1	7:16 P.M.	9	8:10 A.M.	17	12:08 P.M.	24	12:21 P.M.
Aug.	31	2:46 A.M.						
Sept.	29	12:51 P.M.	7	11:47 P.M.	16	1:49 A.M.	22	8:15 P.M.
Oct.	29	5:09 P.M.	7	4:40 P.M.	15	1:44 P.M.	22	4:56 A.M.
Nov.	28	12:16 A.M.	6	9:58 A.M.	13	11:52 P.M.	20	3:12 P.M.
Dec.	27	9:43 P.M.	6	2:48 A.M.	13	8:30 A.M.	20	3:43 A.M.

RADISH

1 oz. to 100 ft., 10 to 12 lbs. per acre

For an early crop, sow in hotbed in January, February and March. As soon as ground is fit to be worked, sow seed in the open, in rows 1 foot apart.

***Cherry Belle** (1951 All America Winner). Almost round, crisp, tangy and uniform. Color is bright scarlet. Does not become pithy. Small short tops.

Crimson Giant. A favorite with home gardeners. Large globular root, 1 to 1½ inches in diameter, crimson, flesh firm.

Early Scarlet Globe. The earliest of all forcing radishes grown for market. Globular, uniform size, bright scarlet, white flesh, crisp and tender.

French Breakfast. A splendid variety for home use; oblong, bright scarlet, white tip. Grows about 1½ inches long and ¾ inch thick.

Long White Icicle. Long slender roots which remain tender and crisp until mature. The small top permits close planting. Early.

Sparkler. 25 days. 1¼ inch in diameter with bright scarlet top, a clear white base and small slender roots, this radish is excellent for the home garden or growing for market. Early.



RADISH, CHERRY BELLE

WINTER VARIETIES

Black Spanish Long or Round. A hardy, large, rather pungent variety for winter use. Keeps unusually well. The long type is 8 to 9 inches long and 2 inches thick, slightly tapered. The skin is black and the flesh white and crisp. The round type measures about 4 inches in diameter.

Chinese White Winter (Celestial). Clear white and smooth; about 8 inches long, 2½ to 3 inches in diameter. Square shoulder and blunt bottom. Flesh white, firm, and crisp; mild; not so pungent as most winter varieties.

Chinese Rose Winter. A large rose-colored variety from the Orient. Hardy and rather mild. The flesh is white, and very crisp. This variety is broadest at its base and is 4 to 5 inches long.

SPINACH

1½ oz. to 100 ft., 10 to 20 lbs. per acre
Sow early in the open

Bloodsdales Improved Thick Leaf. This is the largest spinach. Growth is rapid, and the medium green leaves are large, rounded, slightly crumpled, succulent, and tender. (Fz.)

Nobel, or Giant Thick Leaved (All-America). Of rapid growth. The leaves are the largest of any type and keep well after picking; medium-green, rounded, slightly crumpled, succulent and tender. Excellent for the home garden.

New Zealand. Not true spinach though similar when cooked. Thrives in hot, dry weather. The large, spreading plants have small, thick, pointed, deep green leaves, which can be picked repeatedly throughout the season.

SQUASH

Vining, 1 oz. to 100 ft., 4 lbs. per acre
Bush, 1 oz. to 100 ft., 4 to 6 lbs. per acre

Seeds should be planted about the middle of May, in hills 4 feet apart for bush varieties, and 10 feet apart for the running sorts. Put 5 to 8 seeds in each hill; afterwards thin out, leaving 3 or 4 of the best plants.

SUMMER SQUASH

These varieties are all summer squash types which should be used when the fruits are young and immature.

***Caserta.** Earliest of all, and a prolific yielder. Cylindrical fruits 15 to 18 inches long and 4½ to 5 inches in diameter when mature. Color light yellow, irregularly striped with green.

***Early Prolific Straightneck.** The peak of perfection in a summer squash. Fruits straight and smooth, of creamy yellow color. Vines produce abundantly, 50 days.

Early Summer Crookneck. Very early, 60 to 65 days. The bushy plant is very productive. Fruits attractive, weighing about 2 pounds. The skin is distinctly warted and bears a bright yellow color, while the flesh is pale cream, firm, and tender. Very good for home planting.

White Bush Scallop. A popular variety bearing profusely. Small, rather flat, white squashes with a distinct scalloped edge. Is very early and has a fine flavor.

Zucchini. The favorite Italian squash. It should be eaten when quite young, 4 to 6 inches long. It is a delicious summer variety; very prolific. (Fz.)

WINTER SQUASH

These are all varieties which keep well. They should be picked when fully mature. Most kinds can be stored for months.

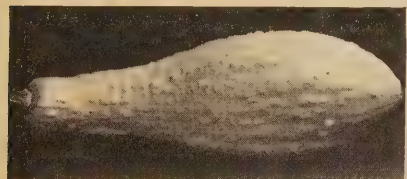
Banana. A late trailing sort, cylindrical and pointed at blossom end. A fine squash for pies. Free from fiber or stringiness. Flesh thick, deep yellow, dry, and of a sweet flavor. Has slate-grey rind.

Butternut. Fruits 3 to 4 pounds, 8 to 10 inches long, bulbous at the bottom end where the small seed cavity is located; the thick neck is solid. Rind thin and tough, creamy yellow in color. Flesh fine grained, nutty. Excellent baking quality.

Improved Hubbard. Large and of warty Hubbard type. Shell dark green, hard, moderately warted. Flesh light orange, very dry and richly flavored. One of the best winter squashes.

Table Queen or Acorn. Small, dark green, acorn shape. Flesh deep yellow, dry, richly flavored. Medium early. A good keeper. Easy to grow.

Umatilla Marblehead. Thick meated squash. Large, slate colored variety. Yields heavy.



SQUASH, SUMMER STRAIGHTNECK

SWISS CHARD

1 oz. to 100 ft., 6 to 10 lbs. per acre

The tops are used like spinach. Culture like beets. Thrives everywhere. Thin to 8 inches.

Lucullus, Dark Green. The fleshy crumpled leaves of this variety make very choice greens. Plant erect; stalks rounded and finely ribbed. Foliage a rich deep green. (Fz.)

Rhubarb Chard. The leaf stalks are crimson, the rich color extending out through the veins into the dark green, heavily crumpled leaves. Delicious flavor.

TOMATOES

In February or March sow seeds lightly in rows in greenhouse, hotbed, or window box, and when plants have reached a height of 3 inches, transplant in hotbeds. About June 1, set out in open ground, 4 feet apart, giving plenty of well rotted manure to each plant. Water freely during hot weather. To obtain the best results, trellises or stakes should be used.



Bonny Best. One of the very best early varieties (75 days). Vine medium, not very hardy. Fruits medium sized, apple shaped, smooth; solid, bright scarlet in color, of excellent quality.

Earliana Improved. (65 days.) One of the earliest scarlet fruited varieties. Medium size, almost seedless and solid. Vine open and spreading. A heavy bearer. Succeeds everywhere.

Jubilee. (72 days.) The fruits are bright orange-yellow, globular, and weigh about 6 ounces.

Marglobe. (73 days.) Excellent home garden variety and particularly valuable for shipping. Plants thrifty and heavily productive with a long bearing period. Fruits uniform deep scarlet; large; uniformly globe shaped; smooth, solid, and of distinct quality.

Pearson, Improved. (76 days.) Primarily for canning but also of value as a shipper. Vigorous self-topping plants with ample foliage to protect the heavy set of fruits, which are medium large, semi-globe and of good red color.

***Pritchard (Scarlet Topper).** (70 days.) Wilt resistant and self-topping. Mid-season to late; prolific. Fruits globe-shaped, deep scarlet, smooth and solid. A good home and market variety and popular for shipping.

Victor. Introduced by the Michigan State College. Fruits are about 3 inches in diameter, globe-shaped and ripen to a deep scarlet. Early.

Yellow Pear. (73 days.) Fine for salads, sweet and delicious. Small, yellow, pear-shaped fruits of exceedingly mild and pleasing flavor.

Red Plum. (73 days.) Plum-shaped fruits, 2 inches long. A clear red. Used for preserves.

Ground Cherry or Husk Tomato. Fruits small, yellow, enclosed in loose paper husks. Prized for preserving.

Rutgers. (86 days.) The most widely grown variety for canning, but also a good green-wrap shipper and all-purpose variety. Plant large with thick stems and vigorous foliage. Fruits globular, bright red, with thick walls and small seed cells.

Scarlet Dawn. (70 days.) Fruits medium large, globular, smooth, free from flat side. Attractive bright scarlet color; uniform. Plant of medium growth, fairly open, early and prolific.

Stokesdale. (73 days.) Produces heavy crops. Almost free of stem-end crack. Slightly earlier and larger than Marglobe.

Important Ordering Suggestions

All seeds quoted in this catalog are shipped by Parcel Post, all transportation and packing charges are paid by us. C.O.D. and money order return fees are not considered as transportation charges and, therefore, must be paid for by the customer. Avoid them by sending remittance with order. Bulk seeds, such as Peas, Beans and Corn, in quantities, are shipped to your nearest express or freight office, transportation collect. If you wish them shipped by Parcel Post, please send necessary postage.

Free Transportation on All Flowers and Vegetable Seeds in Packets, Ounces or ¼ Pounds

SHIPPING ORDERS. When goods are to be shipped by Freight or Express, give plain shipping directions; otherwise we use our best judgment in routing. Goods on which we pay transportation are shipped at our option.

SEND MONEY. Remittances should always accompany the order. Remittances may be made at our risk by any of the following methods (1st and best) **Post Office Order;** (2nd) **Bank Draft;** (3rd) **Express Company Money Order;** (4th) **Cash by Express** in amounts not less than \$50; (5th) **Registered Letters.**

TURNIP

1 oz. to 100 ft., 2 to 3 lbs. per acre

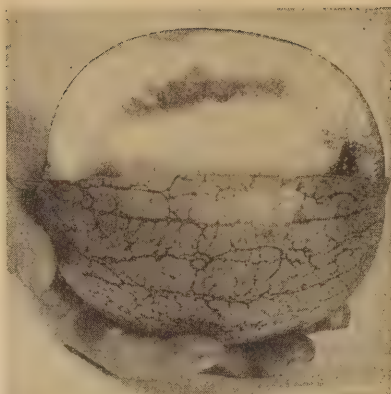
For the main crop, sow in open ground from May to July; for winter use, during July and August. Set out in rows 1½ feet apart, allowing a space of 6 inches between the plants.

Golden Ball or Orange Jelly. A splendid variety for table use; of excellent flavor. Tops small, cut leaved. Roots globular, commonly 4 inches in diameter. Skin smooth, orange-yellow; flesh yellow, firm, fine grained and of good quality. Rapid grower. Table size in 60 days.

Purple Top Strap Leaf. A medium early, very productive variety. Tops medium small, upright, strap-leaved. Roots flat purple red at the top, white below; flesh white, fine grained and tender.

Snowball. A desirable sort for home use and early markets. Tops small and erect. Roots medium sized, round, white throughout, sweet, crisp and tender. Table size in 40 days.

Purple Top White Globe. Grows quite large without developing coarseness. It has white skin, the upper one-third being reddish purple. Flesh pure white, firm, fine grained and of superior flavor. Good keeper. Fine for table use and stock feeding. Table size in 55 days, mature in 70 days.



NEW HAMPSHIRE MIDGET WATERMELON

WATERMELONS

About same culture as muskmelon, except the vines need more room: Fertilize each hill liberally and cultivate thoroughly.

***New Hampshire Midget (Gold Medal Winner).** (65 to 78 days). Early and prolific, up to 6 inches through and weighing up to 6 lbs. Rind very thin. Flesh strawberry red and of excellent flavor. Vines small and vigorous.

King and Queen (Black Seeded Ice Cream). (100 days.) A Russian variety of fair size, round in shape; rind light cream with faint, irregular light green striping; early, prolific and excellent in quality; seeds small, black.

Kleckley's Sweet (Monte Cristo). (85 days.) Average weight 35 pounds. Color is dark green with a bright red flesh that is tender and melting. Not a good shipper. Seeds white with darkened tips.

Klondike (Green). (80 days.) A melon of exceptionally sweet and fine flavor. Flesh is deep red and brittle, fruit oblong. A very good yielder, fairly early.

Striped Klondike. (80 days.) An early garden and shipping variety similar to regular Klondike but with irregular dark green stripes. Fruits oblong, of medium size, rind medium hard. Flesh deepest red; sweet and crisp.

Citron. (95 days.) Used only for preserving; extremely productive. Flesh white and solid.

Dixie Queen. (85 days.) A very prolific, shipping type of mid-season maturity. Fruits oval-round, light green with dark green stripes; rind thin but tough. Flesh bright red, crisp, of splendid quality, quite free from fibre.

Early Kansas. (82 days.) Very popular in the Middle West. It is a melon of large size, alternate stripes of light and dark green, oblong in shape, with deep red flesh and brown seeds.



See
Cultural
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the
Vegetable
and
Flower
Sections

Price
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of
Vegetables
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QUANTITY OF SEED AND SPACING FOR HOME AND MARKET GARDENS

VEGETABLE	Seed Required for 50 ft. of row	Seed Required to sow an acre	Distance between rows inches	Distance apart in rows inches	Depth of planting inches	VEGETABLE	Seed Required for 50 ft. of row	Seed Required to sow an acre	Distance between rows inches	Distance apart in rows inches	Depth of planting inches
Artichoke, Globe.....	¼ oz.	6 to 8 oz.	40 to 48	18 to 24	1	Kohl Rabi	¼ oz.	4 to 5 lbs.	14 to 24	4 to 6	½
Asparagus	½ oz.	4 lbs.	14 to 24	3 to 6	1	Leek	¼ oz.	4 lbs.	14 to 36	2 to 3	¾
Beans, Bush	½ lb.	50 to 60 lbs.	24 to 30	2 to 3	1½ to 2	Lettuce	¼ oz.	3 lbs.	12 to 18	4 to 12	¾
Beans, Lima	½ lb.	30 to 50 lbs.	24 to 36	3 to 6	1½ to 2	Melon, Musk	½ oz.	3 to 4 lbs.	70 to 80	36 to 60	¾
Beans, Pole	½ lb.	30 to 35 lbs.	36 to 48	6 to 8	1½ to 2	Melon, Water	½ oz.	3 to 4 lbs.	72 to 96	72 to 95	¾
Beet	½ oz.	8 to 14 lbs.	14 to 24	3 to 4	½ to 1	Mustard	¼ oz.	4 lbs.	14 to 24	6 to 9	1
Beet, Mangel & Sugar	½ oz.	6 to 10 lbs.	18 to 24	6 to 9	½ to 1	Okra	1 oz.	8 to 10 lbs.	24 to 40	18 to 24	1
Swiss Chard	½ oz.	6 to 10 lbs.	18 to 24	10 to 12	1	Onion	¼ oz.	3 to 4 lbs.	18 to 24	3 to 4	¾
Broccoli	¼ oz.	4 oz.	20 to 36	16 to 22	½ to 1	Onion (for sets)	½ oz.	60 to 85 lbs.	12 to 14	Not thin'd	¾
Brussels Sprouts	¼ oz.	4 oz.	20 to 36	16 to 22	½ to ¾	Parsnip	½ oz.	3 to 4 lbs.	18 to 24	3 to 4	½
Cabbage	¼ oz.	4 oz.	18 to 36	14 to 24	½	Parsley	¼ oz.	3 to 4 lbs.	12 to 20	6 to 8	½
Cardoon	½ oz.	5 oz.	20 to 32	20 to 30	½ to 1	Peas	¾ lb.	90 to 180 lbs.	24 to 36	1 to 2	1 to 2
Carrot	¼ oz.	3 to 4 lbs.	16 to 24	1 to 3	½	Pepper	½ oz.	1 to 2 lbs.	20 to 30	18 to 29	½
Cauliflower	¼ oz.	4 oz.	24 to 30	20 to 24	½	Potatoes	8 lbs.	800-1000	24 to 36	18 to 24	6
Celery	½ oz.	4 oz.	24 to 30	4 to 6	¾	Pumpkin	2 oz.	3 to 4 lbs.	96 to 110	60 to 84	¾
Chicory	½ oz.	4 to 5 lbs.	20 to 36	2 to 3	½ to 1	Radish	½ oz.	10 to 12 lbs.	12 to 18	1 to 2	½
Collard	¼ oz.	5 oz.	24 to 30	14 to 18	½	Rhubarb	½ oz.	3 lbs.	24 to 42	20 to 24	¾
Corn, Pop	3 oz.	6 to 8 lbs.	34 to 40	6 to 8	1	Rutabaga	½ oz.	2 to 4 lbs.	18 to 24	4 to 7	½
Corn, Sweet	4 oz.	10 to 12 lbs.	30 to 42	9 to 12	1	Sage	½ oz.	4 to 5 lbs.	20 to 24	6 to 10	½
Corn Salad	2 oz.	10 to 12 lbs.	14 to 18	3 to 4	¾	Salsify	¾ oz.	7 to 8 lbs.	18 to 24	2 to 3	¾
Cress	1 oz.	10 lbs.	12 to 18	2 to 4	½	Sorrel	½ oz.	4 to 5 lbs.	18 to 22	2 to 3	¾
Cucumber	½ oz.	3 to 4 lbs.	48 to 60	12 to 36	½ to ¾	Spinach	¾ oz.	10 to 20 lbs.	14 to 18	3 to 5	¾
Dandelion	¼ oz.	5 to 6 lbs.	18 to 22	6 to 10	½	Squash, Bush	1 oz.	4 to 6 lbs.	42 to 48	42 to 48	1
Dill	½ oz.	5 lbs.	20 to 36	4 to 6	½	Squash, Vining	1 oz.	4 lbs.	72 to 90	60 to 90	1
Egg Plant	½ oz.	5 to 6 oz.	24 to 36	18 to 24	½	Sunflower	1 oz.	7 to 8 lbs.	48 to 70	10 to 12	1
Endive	½ oz.	4 to 5 lbs.	18 to 24	8 to 12	½	Tomato	2 oz.	40 to 60	36 to 40	¾	
Fennel	½ oz.	3 to 4 lbs.	24 to 32	5 to 8	¾	Tobacco	2 oz.	36 to 48	24 to 36	¾	
Kale	½ oz.	4 to 5 lbs.	24 to 32	14 to 22	½	Turnip	½ oz.	2 to 3 lbs.	12 to 20	2 to 4	½



A Guide to Success with BULBS and TUBERS for Summer Bloom

Summer flowering bulbs and tubers rank with the late flowering annuals and perennials in keeping your garden colorful long after spring has gone. Plant lots of glads and dahlias in the open, sunny spots, and tuberous begonias in the shade, and you will have color in your garden all summer long as well as plenty of gorgeous flowers for cutting.

GLADIOLUS GROWING

Gladiolus will grow in any good garden soil, but prefer a sandy loam. They will do well in the flower borders with other plants if grown in clumps for mass color splashes. If grown for cut flowers they can be handled most easily in rows.

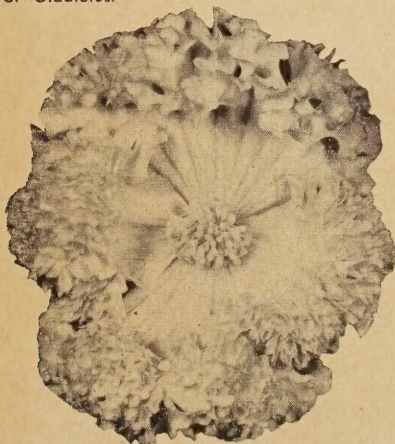
Fertilize and work soil in advance and start setting corms about time of last killing frost. If corms are planted serially, at intervals of two weeks or less, succession of bloom through summer will be sure.

When bloom season is past, foliage may be allowed to die down or plants may be pulled up and hung in well-ventilated and shady place to finish ripening. When foliage is dry, corms may be cut free, cleaned and stored until spring. During storage inspect occasionally and dust with sulphur if mildew shows.

Thrip is the most serious enemy of Gladiolus. Before planting in spring, soak corms a short time in a solution of 1 tablespoonful of lysol to a gallon of water to destroy thrip infection. As soon as plants are six inches tall, start week-end routine of DDT spray or dust to control thrip. When storing corms in fall, put them into paper bags after they have been ripened and cleaned; add a tablespoonful of naphthalene or moth ball powder to 100 corms for from a month or six weeks to get rid of thrip that may have moved into them. This will help insure starting next season with healthy corms and will prevent winter damage while in storage. Discard damaged corms and replace from seed store.

In cleaning corms you can save cormlets that have formed at base, and plant them to increase your stock of each variety.

If there is a Gladiolus Society in your area, join it. There is no better way to make friendly personal contact with others who like to exchange information and tips on hobby growing of Gladiolus.



CRISPA TYPE TUBEROUS BEGONIA

DAHLIA GROWING

Dahlias are to the late summer and fall garden what Daffodils are as color creators for the spring garden. Wide range of color, type, height and blooming time make it possible for you to use them in many a place in the garden and to assure yourself bloom from late summer on until the first frosts. The ANNUAL DAHLIAS, so-called, are easily grown from seed. Start them either indoors and set out when frost is past, or sow in the open when things have warmed, and get slightly later bloom. They are good border material for long season of bloom and for cut flowers.

Other types of Dahlias are grown from TUBERS or CUTTINGS. Tubers do best for an inexperienced grower, although a desirable variety can be multiplied by propagation from cuttings. Deep-worked and well-drained, sunny location is desirable. Set tubers as soon as frost danger is past. Tall-growing types should be staked to prevent breaking in wind or from weight of bloom. Establish routine dusting to keep insects or fungus pests controlled during growing and blooming season. As long as weather is mild, leave in ground. Lift tuber clusters in late November—earlier if rain and cold endanger them. Store in light, airy place where temperature will not drop to freezing. Inspect occasionally and dust with sulphur if mildew protection is needed. In spring, clean and divide, making sure that there will be at least one eye to each tuber; or start them in peat or sand and detach new shoots and root them as cuttings, to be set out in the garden later.

Join a Dahlia Society for contact and exchange of ideas with other fans. There is no better way to familiarize yourself with the various types and continual new additions to the growing list of Dahlias available for all manner of uses in your borders and flower garden developments.



TUBEROUS BEGONIA TIPS

Tuberous-rooted Begonias like well-drained, shady, fertile locations. About March 1 to six weeks before last killing frost in your area, start tubers indoors, in moist peat; set them into pots when leaves begin showing. When danger of frost is past, slip from pots into bed, spacing 12 to 18 inches apart for mass bloom effect. After 10 days top dress bed with dried cow manure and repeat in midsummer. When commercial fertilizer is used, moisten ground both before and after application. Stake and tie tall plants to prevent lopping. Pots or hanging basket care similar to bed, but requires more regular and careful watering as evaporation is greater. Routine of snail baiting, dusting with fungicides and insecticides will take care of pests.

Lift tubers before frost, wash and store them, leaving short portions of stem attached until, after 10 days or so, they will come off easily. When tubers are completely dry, store in trays or in shallow boxes in clean, dry sand and keep in temperatures between 45 and 50 degrees F, until time for replanting next spring. Damaged tubers can be cut clear and wounds sterilized with sulphur or Semesan. Tubers can be divided, like potatoes with an eye to each division, and planted, each cutting producing a new plant. Be sure tubers are completely dry before storing. This is the best insurance you can have against rot. Dust with sulphur if mildew or rot appears during winter.

PLANTING CHART GLADIOLUS · BEGONIAS · DAHLIAS		
Storing GLADIOLUS DRY 8 or 10 CORMS together FUMIGATE with NAPHTHALENE FLAKES in bag	GLADIOLUS SOIL LEVEL 1" INCH 2" 3" 4" 5" 6" 7" 8" 9" 10"	Storing DAHLIAS LIGHT AIRY PLACE STEM DOWN
Storing BEGONIAS PLACE TRAY IN COOL ROOM	DAHLIAS RICH HUMUS STAKE GARDEN SOIL WELL DRAINED LIGHT HUMUS KEEP FERTILIZER FROM DIRECT CONTACT WITH BULBS PREPARE SOIL BED THOROUGHLY	Dividing DAHLIAS EYE ON CROWN CUT LARGE TUBERS IN TWO



PROTECT YOUR LAWN

A **ORTHO-KLOR 44 Spray**—Experts agree—to control lawn pests such as sod webworms (also known as lawn moth), cutworms, and ants. "Spray with ORTHO-KLOR." It's easy, economical, and effective. Contains 44% Chlordane. Kills 2 ways—by vapor and contact. Easy to use in your SPRAY-ETTE hose sprayer.

OR 145—4 oz.
OR 146—8 oz.
OR 147—pint
OR 148—quart

B **ORTHO Crab Grass Killer**—Now, you can conquer crab grass—apply ORTHO Crab Grass Killer as soon as crab grass starts to grow. Use dry—easy to apply with ORTHO Spreader. Make 3 treatments at weekly intervals at recommended dosages for best results. Doesn't harm desirable grasses. 4 lbs. covers 1,200 sq. ft.
OR 149—4 lb. box.
OR 150—18 lb. bag.

C **ORTHO-GRO Liquid Plant Food**—Simple as watering—this new way to fertilize gardens. New ORTHO-GRO balanced fertilizer containing organic fish, mixes instantly with water and is easy to use. It's the ideal and complete food for flowers, vegetables, lawns, trees. Very economical—1 qt. makes up to 80 gal. fertilizer.
OR 140—4 oz.
OR 141—pint
OR 142—quart
OR 143—gallon
OR 144—5 gallon drum



be used for applying sand, lawn seed, etc.
OR 151—Spreader

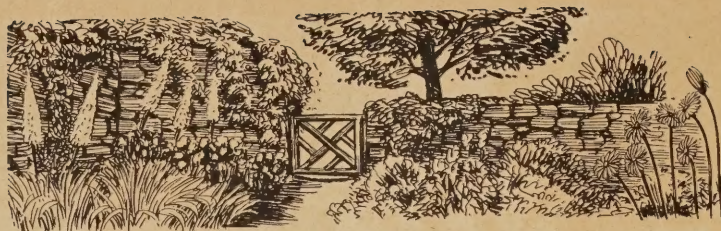


etc. Mixes automatically with water and the water pressure does the work.
OR 152—Sprayer

TRD. MKS. ORTHO REG. U.S. PAT. OFF.



CALIFORNIA
SPRAY-CHEMICAL
CORP.



HELPFUL GARDENING IDEAS

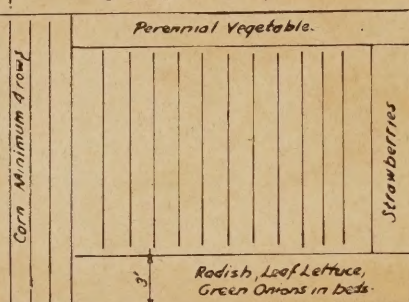
VEGETABLES—WHY NOT?

Rows run north and south to take advantage of necessary sunlight.
Select kinds and varieties desired.
Sow in GROUND: Beans, Peas, Corn, Carrots, Beets, Melons, Onion, Lettuce.

Sow in FRAME (or flats in cold frame)
Tomato, Pepper, Celery, Eggplant, Cabbage and Cauliflower and transplant.
Prepare soil and replant after crop has been harvested.

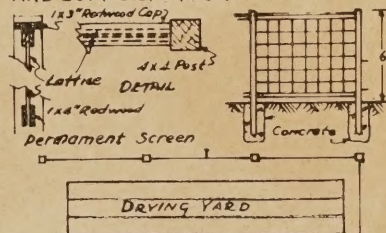
Blueprints for Better Gardens

25'-50' (Width of lot)

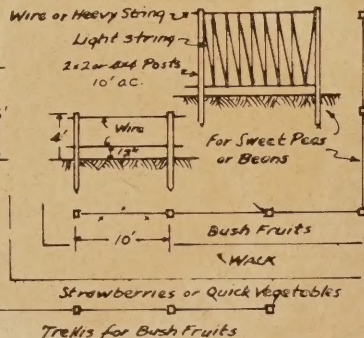


VEGETABLES—WHY NOT? A well planned vegetable garden will provide pleasure for every member of the family. The most modern methods of handling commercially grown garden produce can not put vegetables on your table that will match the freshly gathered home grown product for eating quality.

TRELLIS - SCREENS AND SUPPORTS FOR VINES



Blueprints for Better Gardens



TRELLISES AND SCREENS can do wonders in improving the appearance of your garden. Also they provide a good excuse for planting some of the lovely vines that are so attractive: Sweetpeas, Morning Glory, Cardinal Climber, and Climbing Nasturtiums for instance. Then, of course, there are many woody vines such as Clematis, Jasmine, Wisteria, Roses that will appear to good advantage on a trellis. Berries and grapes often need the support of a trellis or a screen.

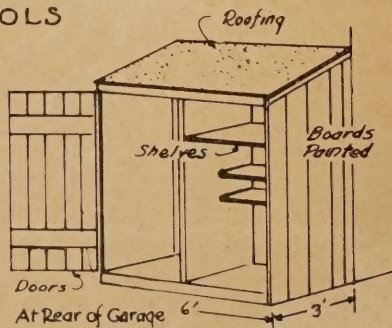
SHED FOR GARDEN TOOLS

Keep tools clean and ready for use in a convenient easy to build shed. One shown will hold average important home garden tools.

Shelves hold small tools, insecticides, fertilizers, etc.

Heavy tools set on floor; light tools hang from pegs at rear wall. Board & batten doors can be locked with hasp and padlock.

Blueprints for Better Gardens



*The
Summer
Flowering*
**BULBS
and
TUBERS**

See
complete
listing
on opposite
page 38.
Cultural
information
on
page 37.



GLADIOLUS FOR SUMMER BLOOM



CAMELLIA FLOWERED
RED TUBEROUS BEGONIA

←
DAHLIA, CLARA CARDER



Indispensible to Mother's Cooking: the Home-Grown Vegetables

We all know of that "Certain Something" that makes Mother's Cooking different and, in an undescrivable way, superior to any other. It's about like that with the vegetables you grow in your own yard. The "Certain Something" you enjoy in them is the earth-to-kitchen freshness that just cannot be purchased. So, in a very real sense, they go together: Mother's Cooking and the home-grown vegetables from your own patch.

DUTHIE COMPANY
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